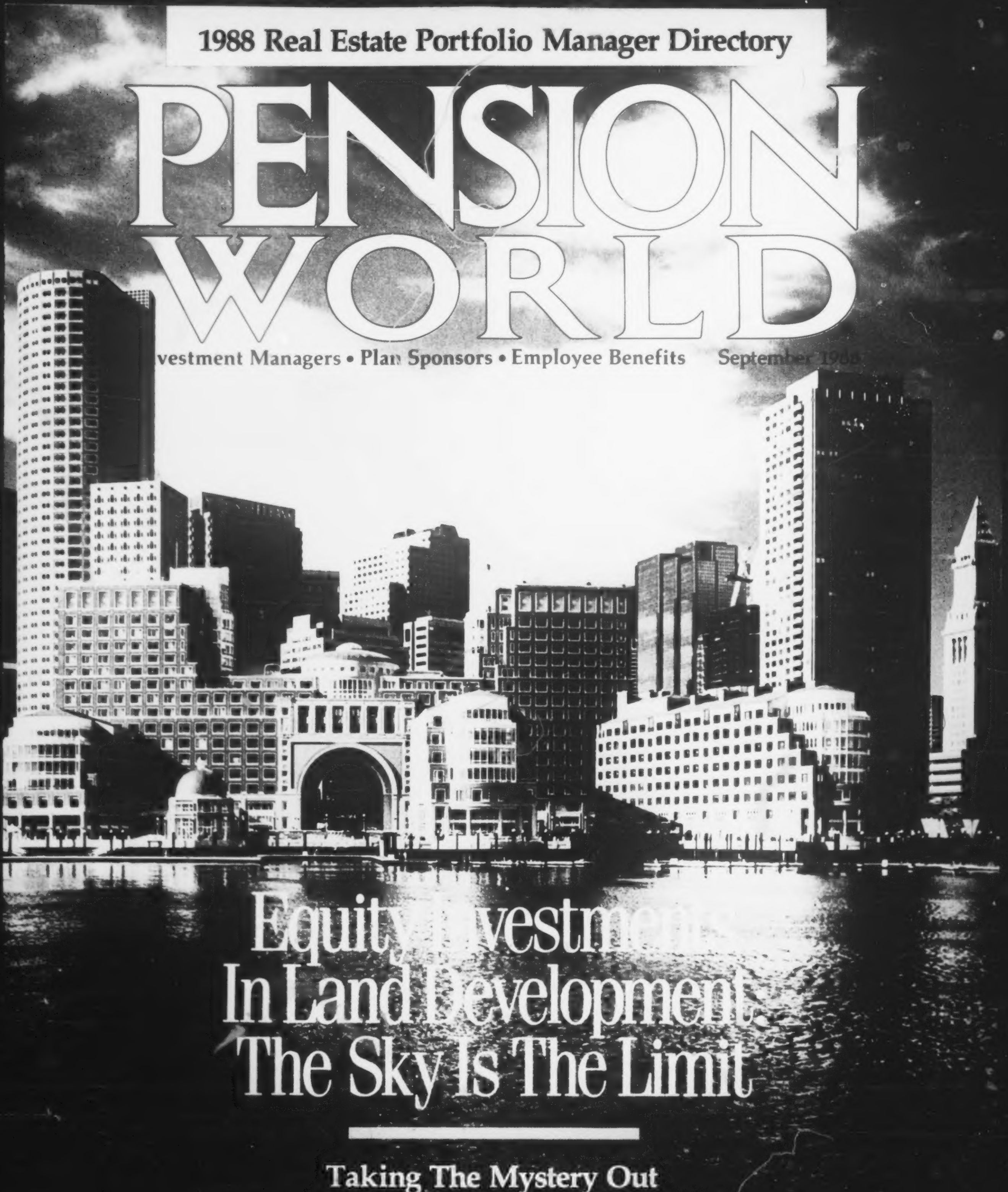


1988 Real Estate Portfolio Manager Directory

PENSION WORLD

vestment Managers • Plan Sponsors • Employee Benefits September 1988

Equity Investments In Land Development: The Sky Is The Limit

Taking The Mystery Out Of The Apartment Market

Employee Benefits:
Self-Directed Plans Come Of Age

Investment Managers
• Plan Sponsors •
Employee Benefits

A Publication Of
Communication Channels, Inc.

PENSION WORLD

September 1988
Volume 24 Number 9

About The Cover: The mixed-use Rowes Wharf development in Boston is a joint venture between Prime Property Fund and the Beacon Cos. Our coverage of the real estate market today begins on page 14.

Photograph courtesy of Equitable Real Estate, New York.
Photographer — Marvin W. Schwartz.

COLUMNS

Insights 8
New York Update 10
Washington Update 12
Plan Design 58
Perspective on Benefits 60
Perspective on Investments 62
Cases and Rulings 63
Guest Viewpoint 66

DEPARTMENTS

Editor's Notes 4
World News 53
News Briefs 55
Executive Suite 56
Calendar 57

INVESTMENTS

Equity Investments In Land Development 14
By Harold Wong
The piece of land acquired for investment should be large enough to attract the interest of developers.

Taking The Mystery Out Of The Apartment Market 20
By Robert A. Fiddaman
By using a system that analyzes objective, quantifiable factors, investors can easily define effective markets.

Real Estate Provides A Stable Alternative To Stocks 24
By Paul E. Dunn
By getting in on the ground floor of a project, investors can share in the developer's profit.

1988 Real Estate Portfolio Manager Directory 26
PENSION WORLD Exclusive Directory
This directory outlines the practices and methods used by firms that make real estate investments for funds.

TIAA-CREF's Outside Chairman Steers New Course 36
By Phyllis Feinberg
With a history of complaints as a backdrop, TIAA-CREF hired a new chairman to deal with its problems.

EMPLOYEE BENEFITS

Proposals Seek To Minimize Fraudulent Reporting 42
By James B. Hyland and Raymond Maria
The Labor Department's inspector general believes more stringent accounting requirements are needed.

Managed-Dental Programs Bite Into Traditional Plans 46
By Mark Troutman
Managed-dental care programs are expected to represent 25 percent of the market by 1995.

Self-Directed Plans Come Of Age 51
By Susan Milner
Self-directed employee-benefit plans allow individuals to plan for retirement.

BPA

Pension World is published monthly by Communication Channels, Inc., George E. Fowkes, Chairman of the Board; Jerrold France, President; Scott Smith, Secretary; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *Pension World* is a registered trademark of Communication Channels, Inc. © 1988 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates: U.S., 1 year, $44; 2 years, $66; Canada and Mexico, 1 year, $48; Overseas Sea Mail, $64; Overseas Air Mail, $114. Single copies, $4. Group rates available. Directory copies: *Pension World* State Retirement Systems Survey (August), $9.95; *Pension World* Real Estate Portfolio Managers Directory (September), $9.95; *Pension World* Directory of Master and Directed Trust Services (December), $9.95; *Pension World* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *Pension World* are not necessarily those of the editors or publisher. Articles appearing in *Pension World* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *Pension World* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *Pension World*, 6255 Barfield Road, Atlanta, GA 30328.

1988 PENSION WORLD Real Estate Portfolio Manager Directory

This directory outlines the practices and methods used by firms that make real estate investments on behalf of pension funds.

The information contained in the 1988 Real Estate Portfolio Manager Directory was compiled by Barbara Katinsky, managing editor of the directory department, and Helen Frye, listings editor.

The 1988 Real Estate Portfolio Manager Directory, compiled by the directory department of PENSION WORLD, provides information on companies that invest in real estate on behalf of pension funds.

This year's directory reports on the real estate-investment practices of 96 firms. The magazine mailed questionnaires to 286 companies involved with real estate investment in April, giving the survey a 34 percent rate of return.

The directory's listings, which are arranged in alphabetical order, include the name of the firm and the firm's address, along with a contact person and telephone number. Additionally, each entry includes the responding firm's total assets under real estate-portfolio management, real estate assets managed for pension funds and the number of pension-fund clients served.

Some companies manage assets for pension-fund clients exclusively, while other companies serve additional clients. Also, some firms, particularly insurance companies, have real estate holdings for their own accounts.

In responding to the questionnaire, companies were asked to provide breakdowns on their holdings by property type, participation offered (pooled funds, separate accounts, etc.) and geographic diversification of their holdings.

The directory also includes each respondent's minimum investment requirement, return on investment and fees. Except where otherwise noted, returns on investment are net of fees. For comparison purposes, respondents were asked to provide cumulative returns as well as returns for the past year.

Because of differences among managers in computing rates of return, a comparison of returns from firm to firm may not be valid. Unless otherwise indicated, all information is current as of Dec. 31, 1987.

The following listings are based on the information provided by the individual companies, on behalf of their clients, to the directory department of PENSION WORLD. While the magazine has attempted to prepare this information as carefully as possible, PENSION WORLD assumes no responsibility for the accuracy of information presented in the listings.

ACQUEST CAPITAL MANAGEMENT INC.
300 E. Long Lake Road, Suite 355
Bloomfield Hills, MI 48013
Contact: David G. Ong, Pres., (313) 645-5130

Total real estate portfolio assets: $145 million
Total pension fund real estate assets: $101 million
Pension fund real estate clients: 9
Asset breakdown: 12% office, 8% industrial, 5% retail, 16% hotel, 32% residential, 27% commingled funds
Participation offered: Separate accounts, direct investment or joint venture
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Not available
Fee: ½ to 1½ points; ½% annual portfolio management fee

AETNA LIFE INSURANCE CO.
151 Farmington Ave.; YFA3
Hartford, CT 06156
Contact: Patricia R. Bowerman, Mgr., (203) 275-2547

Total real estate portfolio assets: $24.1 billion
Total pension fund real estate assets: $17.8 billion
Pension fund real estate clients: 262 (A number of clients are in more than one account)
Asset breakdown: The percentages shown are for Aetna's largest commingled, open-end equity real estate account - RESA. 44.9% office, 13.4% industrial, 19.6% retail, 3.3% hotel, 6.5% residential, 12.3% office/R&D
Participation offered: Commingled open and closed-end separate accounts; specialized (one property type) commingled closed-end separate accounts; individually managed accounts; single property accounts; commingled closed-end fund (limited partnership format) offered through affiliate of Aetna Life, i.e., Aetna Financial Services Inc. All managed by the staff of Aetna Realty.
Geographic diversification: National
Minimum investment: Commingled open-end accounts, none; closed-end accounts, $500,000; individual equity real estate account, target of $100 million (smaller amounts considered); individual residential mortgage account, $10 million
Return on investment: Varies by fund; latest annual - 7.20% for Aetna's closed-end Real Estate Separate Account II
Fee: Annual management fee varies by account, e.g., 1.0%, of net asset value (equity real estate accounts); 0.75% of net asset value (participating mortgage open-end accounts)

AGRIVEST INC.
500 Winding Brook Drive
Glastonbury, CT 06033
Contact: James B. McCandless, Exec. VP, (203) 659-3711

Total real estate portfolio assets: $450 million
Total pension fund real estate assets: Currently working with corporate pension plan sponsors on development of investment strategy employing agricultural real estate
Pension fund real estate clients: None
Asset breakdown: 100% agricultural real estate
Participation offered: Custom tailored individually managed portfolio
Geographic diversification: National
Minimum investment: $5 million
Return on investment: Not available
Fee: Based on account size. Fees are a percentage of asset value managed.

ALDRICH, EASTMAN & WALTCH INC.
265 Franklin St.
Boston, MA 02110
Contact: Robert J. Hannan, VP, (617) 439-9000

Total real estate portfolio assets: $2.8 billion
Total pension fund real estate assets: $2.7 billion
Pension fund real estate clients: 19 separate account clients, plus 21 other pension clients invested in five closed-end commingled funds
Asset breakdown: 29.8% office, 12.2% industrial, 39.7% retail, 0.7% hotel, 1.0% residential, 16.6% development
Participation offered: Closed-end commingled funds, separately managed accounts, special investment funds
Geographic diversification: 32.7% East, 31.6% West, 19.4% Midwest, 16.3% South
Minimum investment: Commingled funds - $5 million, separately managed accounts - $100 million
Return on investment: Cumulative - 15.4% six years ending 12/31/87; latest annual - 14%
Fee: Varies

AMERICAN AGRICULTURAL INVESTMENT MANAGEMENT CO. INC.
631 E. Butterfield Road, Suite 302
Lombard, IL 60148
Contact: Paula M. Kilzer, Farm Analyst/Marketing, (312) 810-0370 or 0040

Total real estate portfolio assets: $15.7 million
Total pension fund real estate assets: $7 million
Pension fund real estate clients: 2
Asset breakdown: 100% agricultural
Participation offered: Closed-end funds, separate accounts
Geographic diversification: West, Southwest, Midwest, South, Midsouth
Minimum investment: $500,000 for closed-end trusts
Return on investment: Latest annual - 4.26%
Fee: 1% of net asset value for closed-end funds. Acquisition and annual management fee for separate accounts

ASB CAPITAL MANAGEMENT INC.
655 15th Street, N.W.
Suite 800
Washington, DC 20005
Contact: Paul R. Lowman, VP & Director, Real Estate Investments, (202) 383-6332

Total real estate portfolio assets: $212.3 million
Total pension fund real estate assets: $199.2 million
Pension fund real estate clients: 14
Asset breakdown: 99% office, 1% retail
Participation offered: Separate accounts and open-end commingled fund
Geographic diversification: Mid-Atlantic, Northeast, West, Southwest
Minimum investment: $500,000
Return on investment: Cumulative - 10.8% 1986; latest annual - 7.8%
Fee: 1.25% of total market value for indirect participation. Direct participation: 1.25% of first $25 million, 1% of next $25 million, 0.75% of next $50 million, 0.50% of amount over $100 million

AUGUST-AM CAL ADVISORS INC.
4730 Woodman Ave., #220
Sherman Oaks, CA 91423-2485
Contact: S. Q. DellaGrotta, Exec. VP, (818) 990-3250

Total real estate portfolio assets: $1.2 billion
Total pension fund real estate assets: $1.2 billion
Pension fund real estate clients: 9 tax-exempt; 15 public partnerships; 18 private partnerships
Asset breakdown: 24.4% office, 16.8% industrial, 17.5% retail, 10.0% hotel, 29.5% residential, 1.8% congregate care, senior housing
Participation offered: Separate accounts; open-end fund
Geographic diversification: National
Minimum investment: $10 million
Return on investment: Cumulative - 16.92% 1984-1986; latest annual - 16.06%
Fee: Annual minimum: $100,000; 1% first $50 million, ¾ of 1% next $50 million, ½ of 1% over $100 million

BALCOR INSTITUTIONAL
THE BALCOR CO.
4849 Golf Road
Skokie, IL 60077
Contact: Ron Gold or Jay Donoghue, Sr. VPs, (312) 677-2900

Total real estate portfolio assets: $6.0 billion
Total pension fund real estate assets: $1.7 billion
Pension fund real estate clients: 15
Asset breakdown: 15% office, 15% retail, 60% residential, 10% industrial, hotels, mobile home communities, mini-storage, land
Participation offered: Separate account and closed-end apartment fund
Geographic diversification: National
Minimum investment: $25 million for separate account, $1 million for closed-end apartment fund
Return on investment: Not available
Fee: Performance based fees

BANK OF AMERICA INVESTMENT REAL ESTATE
180 Montgomery St., Suite 2300
San Francisco, CA 94104
Contact: Jack S. Cooper, Managing Dir., (415) 622-3960

Total real estate portfolio assets: $625 million
Total pension fund real estate assets: $15 million
Pension fund real estate clients: 1
Asset breakdown: 100% office
Participation offered: Separate account
Geographic diversification: National
Minimum investment: $5 million
Return on investment: Not provided
Fee: Negotiated

BANK OF BOSTON
Real Estate Division, 01-19-01
P.O. Box 2016
Boston, MA 02106-2016
Contact: Patricia M. Haralson, Marketing Specialist, (617) 434-0494

Total real estate portfolio assets: $217.2 million
Total pension fund real estate assets: $217.2 million
Pension fund real estate clients: 150
Asset breakdown: 50.3% office; 16.3% industrial; 33.3% retail
Participation offered: Separate accounts, pooled real estate investment fund-open, Northeast properties investment fund-closed.
Geographic diversification: 40% East, 49% South, 5% Midwest, 6% West
Minimum investment: None
Return on investment: Gross return - 12/31/76 to 12/31/87 - PREIF 9.61% income + 2.24 App. - 11.85% total. Latest annual PREIF - 7.73% (7.69 income, .05 appreciation)
Fee: For PREIF and separate accounts - annual fee is 1%, charged .25% quarterly, on net asset value

BENNETT AND KAHNWEILER REALTY ADVISORS
9700 W. Bryn Mawr
Rosemont, IL 60018-5275
Contact: James S. Smith, Pres., (312) 671-7911

Total real estate portfolio assets: $475 million
Total pension fund real estate assets: $300 million
Pension fund real estate clients: 2
Asset breakdown: 35% office, 30% industrial, 25% retail, 5% residential, 5% land
Participation offered: Separate accounts
Geographic diversification: Emphasis on Midwest
Minimum investment: $25 million
Return on investment: Cumulative - 14%, 2 years; latest annual - $13.7%
Fee: Varies

THE BOSTON COMPANY REAL ESTATE COUNSEL INC.
One Boston Place
Boston, MA 02106
Contact: Mary L. Johnston, Exec. VP, (617) 722-7122

Total real estate portfolio assets: $2.2 billion
Total pension fund real estate assets: $2.2 billion
Pension fund real estate clients: 14
Asset breakdown: 66% office, 6% industrial, 17% retail, 3% residential, 5% mixed use, 3% R&D
Participation offered: Separate accounts and closed-end funds
Geographic diversification: National
Minimum investment: $15 million
Return on investment: Cumulative - 16.20% (5 years ended 12/31/87); latest annual - 15.10%
Fee: Acquisition fees equal to 2% of the amount invested for unleveraged assets and 5% for leveraged assets, not to exceed 2% of the total value of the property. Annual asset management fees are 0.5% of market value of the investment for unleveraged assets and 1.0% for leveraged assets, but not more than 0.5% of the market value of the entire properties. Disposition fees are the same as acquisition fees unless the funds are retained for reinvestment, in which case the fees are one half the acquisition fee.

ALEX. BROWN REALTY ADVISORS, INC.
2 N. Charles St.
Baltimore, MD 21201
Contact: Mahlon Apgar IV, Director, (301) 783-3200

Total real estate portfolio assets: $1.3 billion
Total pension fund real estate assets: $882 million
Pension fund real estate clients: 3
Asset breakdown: 62.2% office, 3.1% industrial, 14.2% retail, 16.1% hotel, 2.3% residential, 0.2% land, 1.9% other
Participation offered: Closed-end funds, separate accounts, real estate security placements and private placements
Geographic diversification: 11.7% East, 33.2% West, 43% South, 11.1% Midwest, 1% Canada
Minimum investment: $2 million
Return on investment: Cumulative - 13.4% ('81-'87); latest annual - 8.5%
Fee: Flat fee structure ranges from 60 - 90 base points

CABOT, CABOT & FORBES REALTY ADVISORS INC.
60 State St.
Boston, MA 02109
Contact: John F. Malloy, Sr. VP, (617) 722-8279

Total real estate portfolio assets: $500 million
Total pension fund real estate assets: $500 million
Pension fund real estate clients: 6
Asset breakdown: 50% office, 50% industrial
Participation offered: Separate accounts
Geographical diversification: National
Minimum investment: $100 million
Fee: Varies

CAMBRIDGE REALTY CAPITAL
200 W. Superior
Chicago, IL 60610
Contact: Gary S. Richman, Sr. Inv., (312) 943-1911

Total real estate portfolio assets: $28 million
Total pension fund real estate assets: None
Pension fund real estate clients: 3
Asset breakdown: 100% office
Participation offered: Open
Geographic diversification: Midwest
Minimum investment: $10 million
Return on investment: Cumulative - 9.5%; latest annual - 6.8%
Fee: Not available

CANADA LIFE ASSURANCE CO.
65 Queen St. W., Suite 1401
Toronto, Ontario, Canada, M5H 2M5
Contact: Jock K. S. Fleming, Manager Group Pension Mktg., (416) 364-6465

Total real estate portfolio assets: $750 million
Total pension fund real estate assets: $220 million
Pension fund real estate clients: 117
Asset breakdown: 30% office, 25% industrial, 42% retail, 3% land
Participation offered: Open-end fund
Geographic diversification: 29% British Columbia, 15% Alberta, 52% Ontario, 4% Maritimes
Minimum investment: None
Return on investment: Cumulative - 15.4% 4 year return; latest annual - 12.9% ending 12/;31/87
Fee: 0.75% on first million, 0.40% on next $4 million, 0.25% on next 5 million

CAPITAL CONSULTANTS INC.
2300 S.W. First Ave.
Portland, OR 97201
Contact: Karen Blomquist, VP-Real Estate, (503) 214-1200

Total real estate portfolio assets: $148.5 million
Total pension fund real estate assets: $148.5 million
Pension fund real estate clients: 37
Asset breakdown: 63.6% office, 10.6% industrial, 25.8% retail
Participation offered: Closed-end equity funds, separate individual client placements, mortgages, equity-related mortgages
Geographical diversification: Western U.S.
Minimum investment: Pooled fund [illegible]50,000, Direct - $1 million, Mortgages - $250,[illegible]
Return on investment: Cumulative [illegible]quities 11.4%, Mortgages 10.5% - 5 yrs., 1[illegible]% - 10-15 yrs; latest annual - Equities, 1[illegible]%; Mortgages, 10.7%
Fee: Mortgages, .025%-1% depending upon portfolio size; real estate equities, 1%-1.25%

CENTERRE TRUST CO.
510 Locust St.
St. Louis, MO 63101
Contact: Richard W. Hibbs, Sr. VP, (314) 436-9265

Total real estate portfolio assets: $82.3 million
Total pension fund real estate assets: $10.7 million
Pension fund real estate clients: 37
Asset breakdown: Not available
Participation offered: Open-end equity
Geographic diversification: National
Minimum investment: $100,000
Return on investment: Latest annual - 5.79% (as of 12/31/87)
Fee: 1% of market value less funds invested in short-term instrument fund.

CIGNA ASSET ADVISERS INC.
950 Cottage Grove Road
Hartford, CT 06152
Contact: William E. Chapman, Pres., (203) 726-6241

Total real estate portfolio assets: $12.4 billion
Total pension fund real estate assets: $1.5 billion
Pension fund real estate clients: 460
Asset breakdown: 27.6% office, 4.4% industrial, 28.4% retail, 8.5% hotel, 8.8% residential, 18.8% office/R&D, 3.5% mixed use
Participation offered: Open-end (SA-R), closed end (CERF II), limited partnership for foundations and endowments (Fund T), individual accounts, tax-advantaged accounts
Geographic diversificiation: National
Minimum investment: Open-end, $100,000; closed-end, $1 million; foundations and endowments, $500,000
Return on investment: Varies
Fee: Varies by fund

CITICORP REAL ESTATE INVESTMENT MANAGEMENT
153 East 53rd St., 15th Fl., Zone 1
New York, NY 10043
Contact: H. Piper Andrews, VP, (212) 559-9332

Total real estate portfolio assets: $1.7 billion
Total pension fund real estate assets: $1.7 billion
Pension fund real estate clients: 38
Asset breakdown: 73% office, 6% industrial, 21% retail
Participation offered: Open-end fund (CREEF), separate accounts
Geographic diversification: 53% East, 8% South, 9% Midwest, 30% West
Minimum investment: CREEF - $1 million, separate accounts - $15 million
Return on investment: Cumulative - 20.9% CREEF from 1980 to 1988; latest annual - 1.3% income, 0.2% appreciation, gross of fees, 1.5% total (gross of fees)
Fee: 100 basis points per year, charged quarterly on the net real estate assets of the Fund (CREEF), and 15 basis points per year deducted quarterly on cash reserve

COPLEY REAL ESTATE ADVISORS
399 Boylston St.
Boston, MA 02116
Contact: John C. Phillips Jr., Managing Director, (617) 578-1200

Total real estate portfolio assets: $11.7 billion
Total pension fund real estate assets: $11.7 billion
Pension fund real estate clients: 205
Asset breakdown: 31% office, 23% industrial, 5% retail, 1% hotel, 1% residential, 39% land
Participation offered: Open and closed-end funds, separate accounts
Geographic diversification: 30% East, 2% Midwest, 14% South, 54% West
Minimum investment: $100,000
Return on investment: Cumulative - 20.1% (gross),

1982 through 1987; latest annual - 13.1%
Fee: Management fee of 1.25% per year on the net real estate assets of the fund, deducted quarterly. 0.25% per year on cash reserves, deducted quarterly, and an administrative fee of $2,000 per year deducted annually.

CORPORATE PROPERTY INVESTORS
305 E. 47th St.
New York, NY 10017
Contact: Warren Hamer, Director, Shareholder Relations, (212) 421-8200

Total real estate portfolio assets: $4.3 billion
Total pension fund real estate assets: $2.4 billion
Pension fund real estate clients: 24
Asset breakdown: 12% office, 5% industrial, 83% retail
Participation offered: REIT
Geographic diversification: 31% Northeast, 7% Midwest, 32% South, 13% West
Minimum investment: Not open
Return on investment: Cumulative - 19.15% 5 years; latest annual - 23.97%
Fee: None

CRESTAR BANK
P.O. Box 26548
Richmond, VA 23261-6548
Contact: Ronald E. Martin, Asst. VP, (804) 782-7259

Total real estate portfolio assets: $200 million
Total pension fund real estate assets: $25.6 million
Pension fund real estate clients: 180 million
Asset breakdown: 23% office, 9% industrial, 67% retail
Participation offered: Open-end funds, separate accounts
Geographic diversification: Southeast
Minimum investment: $10,000
Return on investment: 14.07% 4/1/87 - 3/31/88; latest annual - 11.06%
Fee: 1% on real estate value, ⅜% on cash

D.A. MANAGEMENT INC.
7777 Center Ave., Suite. 500
Huntington Beach, CA 92647
Contact: Daniel M. Ardell, Pres., (714) 891-6080

Total real estate portfolio assets: $100 million
Total pension fund real estate assets: Not available
Pension fund real estate clients: 3
Asset breakdown: 12% office, 38% industrial, 30% retail, 20% residential
Participation offered: Separate accounts
Geographic diversification: California, Arizona
Minimum investment: $5 million
Return on investment: Not available
Fee: Varies

EASTDIL REALTY INC.
40 W. 57th St.
New York, NY 10019
Contact: Martha Wallau, (212) 315-7288

Total real estate portfolio assets: $2.3 billion
Total pension fund real estate assets: $2.0 billion
Pension fund real estate clients: 10
Asset breakdown: 60% office, 15% industrial, 13% retail, 1% hotel, 1% residential, 11% R&D
Participation offered: Real estate separate accounts
Geographic diversification: 3% East, 30% South, 20% Midwest, 47% West
Minimum investment: Separate accounts: $50 million
Return on investment: Not available
Fee: Not available

THE EDGECOMBE GROUP
196 Adelaide St., W.
Toronto, Ontario, Canada M5H 1W7
Contact: Rod Carr-Harris, VP, (416) 977-1980

Total real estate portfolio assets: $650 million
Total pension fund real estate assets: $160 million
Pension fund real estate clients: 58
Asset breakdown: 42% office, 13% industrial, 45% retail
Participation offered: Open-end pool, closed-end pool, segregated funds, syndications
Geographic diversification: 51% Ontario, 6% Quebec, 36% West, 7% East
Minimum investment: No minimum for open pool, $1 million minimum for closed pool
Return on investment: Cumulative - 12.32% for 7-year period; latest annual - 16.88%
Fee: 0.9% annually to 1.4% annually for open-end pool

RICHARD ELLIS INC.
527 Madison Ave.
New York, NY 10022
Contact: David R. Hodes, Sr. VP, (212) 355-4810

Total real estate portfolio assets: $3.6 billion
Total pension fund real estate assets: $2.4 billion
Pension fund real estate clients: 12
Asset breakdown: 68% office, 2% industrial, 30% retail
Participation offered: Separate accounts; co-investment vehicles
Geographic diversification: National
Minimum investment: $100 million - separate accounts
Return on investment: Available on request
Fee: Varies

EQUITABLE REAL ESTATE
787 Seventh Ave., 46th Floor
New York, NY 10019
Contact: Joyce R. Frater, Sr. VP, (212) 554-4213

Total real estate portfolio assets: $29.6 billion
Total pension fund real estate assets: $17.1 billion
Pension fund real estate clients: 242
Asset breakdown: 44.9% office, 14.2% industrial, 33.2% retail, 7.5% hotel, 0.2% other
Participation offered: Equitable Real Estate currently manages Prime Property Fund, an open-end fund, PREFER, a commingled fund for defined-contribution employee plans, the Monarch series of closed-end funds, and several individual accounts.
Geographic diversification: National
Minimum investment: $1 million, Prime Property Fund
Return on investment: Cumulative - Prime Property Fund, since inception 11.7% (gross of fees); latest annual - Prime Property Fund, 9.4% (gross of fees)
Fee: First $10 million 1.25%, next $15 million 1.10%, next $25 million 0.90%, over $50 million 0.80%

EQUITEC INSTITUTIONAL REALTY ADVISERS INC.
7677 Oakport St.
Oakland, CA 94614
Contact: Don Jackson, Sr. VP, (415) 430-9900

Total real estate portfolio assets: $1.9 billion
Total pension fund real estate assets: $150 million
Pension fund real estate clients: 27
Asset breakdown: 55% office, 36% light industrial, 9% retail
Participation offered: Closed-end group trust
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Cumulative - 1985 to current, 21%; latest annual - 9.6%
Fee: 1.15% asset management fee

F.I.A. ASSOCIATES
1601 Response Road, Suite 300
Sacramento, CA 95815
Contact: David L. Bonuccelli, Sr. Exec. VP, (916) 920-4051

Total real estate portfolio assets: $1.8 billion
Total pension fund real estate assets: $1.8 billion
Pension fund real estate clients: 4 separate accounts; 1 commingled fund which has 4 participants
Asset breakdown: 50% office, 17% industrial, 20% retail, 8% hotel, 4% residential, 1% land
Participation offered: Closed-end funds, separate accounts
Geographic diversification: 7.6% East, 13% Midwest, 35% South, 44.4% West
Minimum investment: $50 million for separate accounts, $1 million for closed-end fund
Return on investment: Cumulative - not available; latest annual - 8.03%
Fee: Negotiated

FIRST ASSET REALTY ADVISORS
120 S. 6th St.
Minneapolis, MN 55480
Contact: Dennis Gethmann, Director Acquisitions, (612) 343-2732

Total real estate portfolio assets: $80 million
Total pension fund real estate assets: $72 million
Pension fund real estate clients: 15
Asset breakdown: 11% office, 89% retail
Participation offered: Open-end fund
Geographic diversification: Arizona, Florida, Kentucky, Louisiana, Minnesota
Minimum investment: $250,000
Return on investment: Cumulative - 95.4% 10/1/81 through 3/31/88; latest annual - 6.5%
Fee: 1.25% on net fund assets

FIRST CHICAGO INVESTMENT ADVISORS
3 First National Plaza
Chicago, IL 60670-0119
Contact: David A. Schwartz, VP, (312) 732-8471

Total real estate portfolio assets: $999 million
Total pension fund real estate assets: $954 million
Pension fund real estate clients: 123
Asset breakdown: 32% office, 24% industrial, 24% retail, 20% residential
Participation offered: 1 open-end fund, 2 closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million (open-end), $5 million (closed-end), $30 million (separate accounts)
Return on investment: Cumulative - 11.2% (10 yrs.); latest annual - 1.4% (12/31/87)
Fee: Open-end 1.2%, closed-end 1.2%-1.5%, separate accounts negotiable

FIRST WACHOVIA BANK
P.O. Box 3099
Winston-Salem, NC 27150

Contact: Robert Smedley, Sr. VP, (919) 770-6466

Total real estate portfolio assets: $661.2 million
Total pension fund real estate assets: $397.6 million
Pension fund real estate clients: 229
Asset breakdown: 3.7% office, 60% industrial, 36.3% other
Participation offered: Open-end fund
Geographic diversification: 44% West, 24% Midwest, 29% South, 3% East
Minimum investment: $1,000
Return on investment: Cumulative - 13.02% for 10 yrs., 8.91% for 5 yrs; latest annual - 5.08% - 1987
Fee: Annual charge of 1.125% on market value, .25% charge for other assets in the fund (applied directly to the fund)

FIRST WISCONSIN TRUST CO.
P.O. Box 2054
Milwaukee, WI 53201
Contact: Earl D. Lillydahl, VP, (414) 765-4844

Total real estate portfolio assets: $20 million
Total pension fund real estate assets: $10 million
Pension fund real estate clients: 35
Asset breakdown: 50% office, 20% industrial, 30% retail
Participation offered: Open-end
Geographic diversification: Midwest
Minimum investment: $10,000
Return on investment: Cumulative - 50% for 5 yrs.; latest annual - 10.17%
Fee: 1.5% on real estate assets, 0.25% on liquid assets

FOREST INVESTMENT ASSOCIATES
One Premier Plaza, Suite 710
5605 Glenridge Drive
Atlanta, GA 30342
Contact: David S. Graham, Principal, (404) 847-0794

Total real estate portfolio assets: $40 million
Total pension fund real estate assets: $30 million
Pension fund real estate clients: 1
Asset breakdown: 100% timber
Participation offered: Separate accounts, closed-end fund
Geographic diversification: National
Minimum investment: $10 million, separate account
Return on investment: Cumulative - 12% (3/31/87 - 12/31/87)
Fee: 1.2% of market value of timberland

GROUP ONE INVESTMENTS
77 W. Washington St., Suite 1005
Chicago, IL 60602
Contact: Robert H. Weitzman, Finance Partner, (312) 346-3434

Total real estate portfolio assets: $200 million
Total pension fund real estate assets: $25 million
Pension fund real estate clients: 30
Asset breakdown: 20% office, 10% industrial, 20% retail, 50% residential
Participation offered: Special accounts
Geographic diversification: National
Minimum investment: $500,000
Return on investment: Cumulative - 9%; latest annual - 8½%
Fee: Varies

GRUBB & ELLIS REALTY ADVISERS
One Montgomery St.
Telesis Tower, Suite 3200
San Francisco, CA 94104
Contact: Richard Cortese, VP & Director of Mktg., (415) 956-1990

Total real estate portfolio assets: $628 million
Total pension fund real estate assets: $99.4 million
Pension fund real estate clients: 5
Asset breakdown: 31% office, 24% industrial, 27% retail, 15% residential, 3% land
Participation offered: Separate accounts, closed-end funds
Geographic diversification: National
Minimum investment: $1 million for funds, $25 million for separate accounts
Return on investment: Cumulative - 2.72%
Fee: Separate account fee has traditionally been 1% acquisition, 1% management, and 1% disposition. 1.5% acquisition fee on the gross purchase price of each property acquired. 0.75% annual asset management fee on the aggregate value of all fund properties valued at the lower of cost or appraised value. An incentive fee of 15% of the excess remaining - after the investors have received a return of capital and a 10% cumulative return - from cash from operations and proceeds of sale

JOHN HANCOCK FINANCIAL SERVICES
HANCOCK TIMBER RESOURCE GROUP
P.O. Box 111
T-49 Investment Marketing
Boston, MA 02117
Contact: Richard N. Smith Sr., Timber Real Estate Investment Officer, (617) 572-4525

Total real estate portfolio assets: $12.7 billion (total timber real estate - $488 million)
Total pension fund timber real estate assets: $281 million
Pension fund timber real estate clients: 13
Asset breakdown: 100% timber
Participation offered: Closed-end pooled and non-pooled separate accounts & closed-end funds
Geographic diversification: 37% Pacific Northwest, 63% Southeast
Minimum investment: $1 million for pooled funds, $20 million for non-pooled accounts
Return on investment: Varies
Fee: Varies

JOHN HANCOCK PROPERTIES INC.
Two Copley Place, Suite 200
Boston, MA 02117
Contact: John W. Kemble, VP, Investor Relations, (617) 572-9128

Total real estate portfolio assets: $12.7 billion (total commercial real estate - $2.1 billion)
Total pension fund real estate assets: $639 million
Pension fund real estate clients: 69
Asset breakdown: 34% office, 16% industrial, 6% retail, 16% hotel, 28% residential
Participation offered: Limited partnerships, open and closed-end separate accounts
Geographic diversification: 37% East, 27% South, 17% Midwest, 17% West, 2% other
Minimum investment: Varies by fund
Return on investment: Varies
Fee: Varies

HARRIS TRUST & SAVINGS BANK
P.O. Box 755
111 W. Monroe St. - 6C
Chicago, IL 60690
Contact: John K. Rutledge, VP, (312) 461-6346

Total real estate portfolio assets: $34 million
Total pension fund real estate assets: $34 million
Pension fund real estate clients: 169
Asset breakdown: 34% office, 17% industrial, 33% retail, 16% business park
Participation offered: Open-end fund
Geographic diversification: National
Minimum investment: $500,000
Return on investment: Cumulative - 59.6% 1/1/83-3/31/88; latest annual - 8.26%
Fee: 0.75% of real estate investments plus graduated administrative fee

HAYDEN, TOLZMANN & ASSOCIATES INC.
693 Bloomfield Ave.
P.O. Drawer 708
Bloomfield, CT 06002-0708
Contact: David C. Tolzmann, CRE, Pres., (203) 243-1481

Total real estate portfolio assets: $51 million
Total pension fund real estate assets: $51 million
Pension fund real estate clients: 2
Asset breakdown: 51.1% office, 33.5% industrial, 15.4 retail
Participation offered: Separate accounts
Geographic diversification: 22.3% West, 25.4% South, 29.5% Midwest, 22.8% East
Minimum investment: $10 million
Return on investment: Cumulative - 13.20% for 1984-1987; latest annual - 13.27
Fee: Monthly retainer plus acquisition and disposition fee, plus monthly asset management fee

HEITMAN ADVISORY CORP.
180 N. LaSalle St.
Chicago, IL 60601
Contact: David Glickman, Pres., (312) 855-5700

Total real estate portfolio assets: $5 billion
Total pension fund real estate assets: $4.7 billion
Pension fund real estate clients: 50
Asset breakdown: 42% office, 38% industrial, 20% retail
Participation offered: Advisory and discretionary separate accounts, closed-end funds
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Not available
Fee: Based on cash invested

JMB INSTITUTIONAL REALTY CORP.
875 N. Michigan Ave., Suite 3960
Chicago, IL 60611-1950
Contact: John S. Lillard, Pres., (312) 915-1900

Total real estate portfolio assets: $20 billion
Total pension fund real estate assets: $5.9 billion
Pension fund real estate clients: 228
Asset breakdown: (Excluding CFCL Acquisition Corp.) 49% office, 48% retail, 3% residential
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: JMB Group Trust funds - $1 million, endowment & foundation realty funds - $150,000, separate accounts: $100 million
Return on investment: Varies
Fee: JMB Group Trust I and II - 1.25% of gross real estate asset value plus up to 5% of gross revenues from property operations as property management fees. JMB Group Trusts III, IV and V - 1.25% of gross real estate asset value plus 3.75% of gross revenues from property operations as property management fees. Endowment and Foundation Realty Funds I-IV - 1.25% of gross real estate asset value plus up to 5% of gross revenues from property operations as property management fees. JMB Institutional Apartment Partner-

ship-I - 1% of gross offering proceeds as acquisition fee. General Partners receive 15% of distributable cash from operations and 15% of net sale proceeds after return to Limited Partners of their capital contributions. Separate accounts - negotiated

JONES LANG WOOTTON REALTY ADVISORS
101 E. 52nd St.
New York, NY 10022
Contact: John A. Weisz, Managing Director, (212) 838-9501

Total real estate portfolio assets: $1.5 billion
Total pension fund real estate assets: $1 billion
Pension fund real estate clients: 6
Asset breakdown: 30% office, 10% industrial, 15% retail, 15% hotel, 5% residential, 25% mixed use
Participation offered: Separate accounts
Geographic diversification: 40% Northeast, 20% Southeast, 15% Central, 25% West
Minimum investment: $150 million over 2-3 years
Return on investment: Available on request
Fee: Not provided

KARSTEN REALTY ADVISORS
12121 Wilshire Blvd., #900
Los Angeles, CA 90025
Contact: A. Redmond Doms, Jr., Managing Principal, (213) 826-0035

Total real estate portfolio assets: $1.2 billion
Total pension fund real estate assets: $565.9 million
Pension fund real estate clients: 19
Asset breakdown: 50% office, 9% industrial, 8% retail, 18% hotel, 1% residential, 6% land, 8% primary mortgages
Participation offered: Separate accounts, closed-end funds, workouts and specialized asset management services, development consulting services
Geographic diversification: 1% East, 35% South, 2% Midwest, 62% West
Minimum investment: $1 million
Return on investment: Cumulative - 11.7% (5 years); latest annual - 11.9%
Fee: Typically a percentage of dollars invested for acquisitions and of appraised value for asset management. Also willing to work on an incentive fee basis.

KENNEDY ASSOCIATES REAL ESTATE COUNSEL INC.
2400 Financial Center Bldg.
Seattle, WA 98161
Contact: Jim C. Snyder, Pres., (206) 623-4739

Total real estate portfolio assets: $805 million
Total pension fund real estate assets: $805 million
Pension fund real estate clients: 8 separate accounts; 99 in commingled fund
Asset breakdown: 51% office, 13% industrial, 4% retail, 1% hotel, 1% mixed-use, 30% business parks
Participation offered: Separate accounts, open-end commingled fund (MEPT)
Geographic diversification: National
Minimum investment: Separate accounts—$25 million; MPT—no minimum
Return on investment: Cumulative - 612.3% from 4/1/76 to 12/31/87; latest annual - 10.2%
Fee: Negotiated

LANDAUER ADVISORS INC.
335 Madison Ave.
New York, NY 10017
Contact: Peter A. Peyser, Sr. VP, (212) 687-2323

Total real estate portfolio assets: $752.2 million
Total pension fund real estate assets: $493.2 million
Pension fund real estate clients: 8
Asset breakdown: 51% office, 2% industrial, 47% retail
Participation offered: Closed-end funds, separate accounts, asset management services, acquisition services
Geographic diversification: National
Minimum investment: Separate accounts, $25 million; current closed-end fund (Landauer Momentum Fund), $2.5 million
Return on investment: Cumulative - 18.2% separate accounts (1970-1987), 12.9% Landauer Fund I (1984-1987); latest annual - 10.1% separate accounts, 9.2% Landauer Fund I
Fee: Separate account fees for acquisitions, dispositions, asset management and financing services vary according to the amount invested, number of properties to be purchased or managed, complexity of the deal structures to be used and the amounts of discretionary authority allocated. Landauer Momentum Fund, 1.25% of the subscription price for the first five years. 1% of the net asset value of the Fund for the remaining 6-10 years.

LANDVEST
Ten Post Office Square
Boston, MA 02109
Contact: Richard F. Perkins, Pres., (617) 723-1800

Total real estate portfolio assets: $25 million
Total pension fund real estate assets: $15 million
Pension fund real estate clients: 12
Asset breakdown: 100% timber
Participation offered: Separate accounts
Geographic diversification: Eastern U.S.
Minimum investment: $250,000
Fee: Negotiated

LASALLE ADVISORS
11 S. LaSalle St.
Chicago, IL 60603
Contact: Hugh E. Reams Jr., VP, (312) 782-5800

Total real estate portfolio assets: $2.2 billion
Total pension fund real estate assets: $2.2 billion
Pension fund real estate clients: 73
Asset breakdown: 59% office, 12% industrial, 29% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: 20% West, 25% South, 30% Midwest, 25% East
Minimum investment: $5 million with exceptions
Return on investment: Cumulative - 16.62% (3/81 - 3/88); latest annual - 14.22% (pre-fee), 12.95% (post-fee)
Fee: Annually, 1.25% of net real estate assets

LEHNDORFF & BABSON REAL ESTATE COUNSEL
One Memorial Drive
Cambridge, MA 02142
Contact: James S. White, Exec. VP, (617) 225-3800

Total real estate portfolio assets: $2.3 billion
Total pension fund real estate assets: $1.1 billion
Pension fund real estate clients: 43
Asset breakdown: 56% office, 4% industrial, 40% retail
Participation offered: Closed-end commingled funds, direct separate accounts
Geographic diversification: 32% East, 30% South, 10% Midwest, 28% West
Minimum investment: $1 million for closed-end funds
Return on investment: Cumulative - 42.8% 3 years ending 12/31/88; latest annual - 11.9%
Fee: 1.25% per annum based on fair market value of real property assets of the Group Trust as of 12/31/87

LIEBERMAN COS.
199 Middle Neck Road
Great Neck, NY 11021
Contact: Bruce R. Lieberman, Pres., (516) 466-6565

Total real estate portfolio assets: $120 million
Total pension fund real estate assets: $40 million
Pension fund real estate clients: 4
Asset breakdown: 15% office, 5% retail, 80% residential, 5% land
Participation offered: Flexible to suit needs of investor
Geographic diversification: National
Minimum investment: $500,000
Return on investment: Varies
Fee: Negotiated

LOEB PARTNERS REALTY
521 Fifth Ave.
New York, NY 10175
Contact: Gary L. Naughton, VP, (212) 883-0371

Total real estate portfolio assets: $600 million
Total pension fund real estate assets: $150 million
Pension fund real estate clients: 2
Asset breakdown: 90% office, 10% retail
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $5 million
Return on investment: 12% - 18% annual yields
Fee: Varies

LOMAS ADVISORS
2001 Bryan Tower, Suite 3300
Dallas, TX 75201
Contact: Berry Hamilton, VP, (214) 746-8290

Total real estate portfolio assets: $957 million
Total pension fund real estate assets: $957 million
Pension fund real estate clients: 90
Asset breakdown: 67.4% office, 12.09% industrial, 6.93% retail, 13.58% residential
Participation offered: Closed-end funds and separate account management
Geographic diversification: National
Minimum investment: $1 million for closed-end funds
Return on investment: Not available
Fee: Varies

MIG COS.
1645 Palm Beach Lakes Blvd.
West Palm Beach, FL 33401
Contact: E. Scott Urdang, Principal, (305) 686-1800

Total real estate portfolio assets: $800 million
Total pension fund real estate assets: $800 million
Pension fund real estate clients: 11
Asset breakdown: 20% office, 10% industrial, 35% retail, 30% residential, 5% self storage
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $500,000
Return on investment: Latest annual - 14.0%
Fee: Varies

MASSACHUSETTS MUTUAL LIFE INSURANCE CO.
1295 State St.
Springfield, MA 01111
Contact: Leo J. Polverini Jr., VP, (413) 788-8411

Total real estate portfolio assets: $4.2 billion
Total pension fund real estate assets: $62 million
Pension fund real estate clients: 48
Asset breakdown: 28.6% office, 29.4% industrial, 42% retail
Participation offered: Open-end commingled separate account
Geographic diversification: 26% East, 6% South, 26% Midwest, 42% West
Minimum investment: $100,000
Return on investment: Cumulative - 8.4% 5 years ended 12/31/88; latest annual - 6.03%
Fee: 1% of assets managed

McMAHAN REAL ESTATE ADVISORS INC.
201 California St., Suite 400
San Francisco, CA 94111
Contact: Frank C. Harding Jr., VP; Jean C. Hurley, VP, (415) 433-7770

Total real estate portfolio assets: $553 million
Total pension fund real estate assets: $411 million
Pension fund real estate clients: 11
Asset breakdown: 57% office, 12% industrial, 31% retail
Participation offered: Separate accounts
Geographic diversification: West of the Mississippi
Minimum investment: $30 million
Return on investment: Cumulative - 10.0% 5 yrs., 8.8% 3 yrs.; latest annual - 7.4% separate account, net of fees but before portfolio expenses
Fee: Negotiated

H.D. McNEE REALTY ADVISERS
9333 Genesee Ave. #P25
San Diego, CA 92121
Contact: Henry H. Williams, Exec. VP, (619) 452-7551

Total real estate portfolio assets: $59.4 million
Total pension fund real estate assets: $59.4 million
Pension fund real estate clients: 3
Asset breakdown: 80% office/retail, 8% hotel, 12% residential
Participation offered: Separate accounts
Geographic diversification: Southwest U.S.
Minimum investment: Varies
Return on investment: Not available
Fee: Negotiated

MELLON REAL ESTATE INVESTMENT MANAGEMENT CORP.
551 Madison Avenue, 15th Floor
New York, NY 10022
Contact: Karin E. Shewer, Sr. VP, (212) 702-4049

Total real estate portfolio assets: $1.2 billion
Total pension fund real estate assets: $1.1 billion
Pension fund real estate clients: 14 (10 pension funds; 2 offshore investors; 1 real estate investment trust; and personal trust account clients)
Asset breakdown: 60% office, 13% industrial, 15% retail, 5% hotel, 5% residential, 2% land
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $10 million
Return on investment: Not provided
Fee: Acquisition fees for real estate investments will be 1.5% of the total purchase price. Portfolio management fees will be 0.5 of 1% of the asset value as determined by capitalizing the income received at 10% during the last 12 months. For properties owned less than 12 months, cash flow will be annualized and capitalized at 10%. For fee determination purposes, income accounts will be kept on an accrual basis.

L.J. MELODY & CO.
5847 San Felipe, Suite 4400
Houston, TX 77057
Contact: Robert D. Barkley, VP, (713) 787-1900

Total real estate portfolio assets: $2.1 billion
Total pension fund real estate assets: $780 million
Pension fund real estate clients: 2
Asset breakdown: 46% office, 54% retail
Participation offered: Separate accounts, closed-end funds
Geographic diversification: National
Minimum investment: $25 million
Return on investment: Varies
Fee: Varies

MERCANTILE BANK
P.O. Box 387
St. Louis, MO 63166
Contact: William H. Laird, VP, (314) 425-2742

Total real estate portfolio assets: $8 million
Total pension fund real estate assets: $8 million
Pension fund real estate clients: 22
Asset breakdown: 22% office, 16% industrial, 32% retail, 7% hotel, 11% residential, 2% land, 10% other
Participation offered: Open-end fund
Geographic diversification: 27% East, 16% Midwest, 27% South, 30% West
Minimum investment: $100,000
Return on investment: Cumulative - 8% (6/1/86 - 4/30/88); latest annual - 11.2%
Fee: 0.6 of 1% (charged monthly) plus 0.25 of 1% on short-term investments

METRIC INSTITUTIONAL REALTY ADVISORS
950 Tower Lane
Foster City, CA 94404
Contact: Robert A. Fiddaman, Pres., (415) 378-7123

Total real estate portfolio assets: $1.9 billion
Total pension fund real estate assets: $158 million
Pension fund real estate clients: 39,432
Asset breakdown: 37% office, 19% industrial, 18% retail, 26% residential
Participation offered: Closed-end funds, separate accounts and specified assets
Geographic diversification: 9% East, 24% Midwest, 58% South, 9% West
Minimum investment: $500,000 (commingled), $50 million (separate account)
Return on investment: Varies
Fee: Varies

METROPOLITAN LIFE
One Madison Ave.
New York, NY 10010
Contact: Bruce Kosakowski, Asst. VP, (212) 578-8637

Total real estate portfolio assets: $23 billion
Total pension fund real estate assets: $759.7 million
Pension fund real estate clients: 115
Asset breakdown: 54% office, 23% industrial, 18% retail, 4% hotel, 1% land
Participation offered: Open-end, closed-end, and separate accounts per individual
Geographic diversification: 20% East, 28% South, 20% Midwest, 32% West
Minimum investment: Open-end $100,000; closed-end $1 million
Return on investment: Varies
Fee: Per contract holder - 1.25% for first $10 million; 1% for additional investment

MONY FINANCIAL SERVICES
1740 Broadway
New York, NY 10019
Contact: Robin L. Blauer, Investment VP, (212) 708-2027

Total real estate portfolio assets: $5.6 billion
Total pension fund real estate assets: $110 million
Pension fund real estate clients: 51
Asset breakdown: 50% office, 11% industrial, 23% retail, 16% office/R&D
Participation offered: Open-end commingled fund, separate accounts, mortgage conduit programs
Geographic diversification: 12% East, 52% South, 13% Midwest, 23% West
Minimum investment: $100,000
Return on investment: Cumulative - 9.1% 3/31/83 to 3/31/88; latest annual - 1.4%
Fee: Varies

MREALTY CORP.
P.O. Box 655415
14 MPlace
Dallas, TX 75265-5415
Contact: Frank W. Tilley, Pres., (214) 290-3500

Total real estate portfolio assets: $330 million
Total pension fund real estate assets: $76 million
Pension fund real estate clients: 75
Asset breakdown: 10% office, 35% industrial, 55% retail
Participation offered: Open-end fund, separate accounts
Geographic diversification: 30% Southeast, 45% Southwest, 25% West
Minimum investment: $50,000 in fund
Return on investment: Cumulative - 5.61% 5 years; latest annual - 8.5%
Fee: Fund - 1% acquisition fee, 1% disposition fee, 1% asset management fee on real estate assets, 0.5% on cash equivalents. Separate accounts - negotiated

MUTUAL BENEFIT LIFE
570 Broad St.
Newark, NJ 07101
Contact: Michael K. Farrell, VP Group and Pension Sales, (201) 481-8464

Total real estate portfolio assets: Not available
Total pension fund real estate assets: $30.4 million
Pension fund real estate clients: 225
Asset breakdown: 31% office, 62% industrial, 8% retail
Participation offered: Open-end separate account
Geographic diversification: 69% South, 23% West, 8% Midwest
Minimum investment: $20,000
Return on investment: Cumulative - 10.3% annualized (1982-1987); latest annual - 1.2%
Fee: Management fee not to exceed 1.5% of net assets, on an annual basis

NCNB NATIONAL BANK
One NCNB Plaza
Charlotte, NC 28255

Contact: Mark S. Coltrin, VP, (704) 374-8405

Total real estate portfolio assets: $550.4 million
Total pension fund real estate assets: $550.4 million
Pension fund real estate clients: 681
Asset breakdown: 11.7% office, 32.2% industrial, 0.1% retail, 8.4% residential, 44.8% land, 2.8 timber
Participation offered: Open-end fund (NCNB Real Estate Fund), closed-end fund (NCNB Southen Properties Fund I), separate accounts
Geographic diversification: Southeastern U.S.
Minimum investment: None in open-end fund, $50 million for separate accounts; closed-end fund is not accepting contributions
Return on investment: Cumulative - NCNB Real Estate Fund - 9.3% (1987), NCNB Southern Property Fund - 8.05% (1987)
Fee: Open-end fund - 1.2% of net assets annually; closed-end fund - 1% of net assets annually

NATIONAL PROPERTY ADVISORS

89 Main St.
P.O. Box 308
Montpelier, VT 05602-0308
Contact: Andrew McGregor, Chief Operating Officer, (802) 223-9595

Total real estate portfolio assets: $270 million
Total pension fund real estate assets: $92.8 million
Pension fund real estate clients: 9
Asset breakdown: 15.1% office, 66.5% industrial, 10.2% retail, 8.1% land
Participation offered: Closed-end funds separate accounts
Geographical diversification: National
Minimum investment: $2 million
Return on investment: Varies
Fee: 1.2% per year, deducted quarterly, on the market value of the real estate assets before subtracting liabilities. .25% per year deducted quarterly on cash and cash investments excluding any shares of Sentinel Cash Management Fund. Separate accounts - negotiated. Incentive based fees are acceptable.

THE O'CONNOR GROUP

200 Park Ave.
New York, NY 10166
Contact: Nancy I. Lashine, VP, (212) 687-7420

Total real estate portfolio assets: $1.2 billion
Total pension fund real estate assets: $540 million (does not include commingled fund)
Pension fund real estate clients: Corporate, 5; public, 5; foundations/endowments, 4
Asset breakdown: 16% office, 2% industrial, 80% retail, 2% mixed use
Participation offered: Closed-end fund (secondary offering of the Retail Property Trust); separate accounts
Geographical diversification: National
Minimum investment: RPT $10 million; separate accounts $100 million
Return on investment: Cumulative - 16.9 (4 year); latest annual - 15.9 (1987)
Fee: Incentive based

THE PECKHAM BOSTON CO.

Four Longfellow Place, Suite 3305
Boston, MA 02114
Contact: John M. Peckham III, Pres., (617) 523-4440

Total real estate portfolio assets: $80 million
Total pension fund real estate assets: $22 million
Pension fund real estate clients: 4
Asset breakdown: 40% office, 20% industrial, 40% residential
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $1 million
Fee: Varies

PENREAL ADVISORS LTD.

600 - 1100 Melville St.
Vancouver, B.C., Canada V6E 4A6
Contact: Walter Badun, Pres., (604) 685-8351

Total real estate portfolio assets: $150.7 million (Canadian)
Total pension fund real estate assets: $150.7 million
Pension fund real estate clients: 58
Asset breakdown: 48% office, 22% industrial, 30% retail
Participation offered: Closed-end fund
Geographic diversification: 4% Montreal, 22% Calgary, 35% Toronto, 39% Vancouver
Minimum investment: $500,000 (5 units)
Return on investment: Cumulative - 14.95%, since 10/1/83; latest annual - 14.56%
Fee: Portfolio management fee of 0.5% per annum, acquisition and disposal fees

THE PHOENIX

One American Row
Hartford, CT 06511
Contact: H. Russell Irving, VP, Pension Sales & Mktg., (203) 275-5567

Total real estate portfolio assets: $233.8 million (open-end, net assets market value)
Total pension fund real estate assets: Pending
Pension fund real estate clients: 189
Asset breakdown: 44% office, 21% industrial, 11% retail, 24% residential
Participation offered: Open-end, closed-end currently open for committments, individual accounts
Geographic diversification: 33% Midwest, 4% East, 30% South, 33% West
Minimum investment: Open-end $50,000, closed-end $5 million
Return on investment: Cumulative - 13.58% (3 years), 14.93% (5 years); latest annual - 11.26%
Fee: Varies

PMREALTY ADVISORS, INC.

800 Newport Center Drive
Newport Beach, CA 92660
Contact: Pete Hammer, Managing Director, (714) 721-5000

Total real estate portfolio assets: $500 million
Total pension fund real estate assets: $220 million
Pension fund real estate clients: 21
Asset breakdown: 25% office, 43% industrial, 32% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Latest annual - 9.2%
Fee: 1.25% of gross assets

T. ROWE PRICE REALTY ADVISERS INC.

515 S. Flower St., Suite 3100
Los Angeles, CA 90071
Contact: Scott Calder, VP-Director of Acquisitions, (213) 239-8800

Total real estate portfolio assets: $250 million
Total pension fund real estate assets: $90 million
Pension fund real estate clients: 4
Asset breakdown: 20% office, 70% industrial, 10% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Cumulative - 6.4% (1985-1987) average annual cash return after fees; latest annual - 6.7%
Fee: 1% asset management fee plus 10% over 10% cumulative preferred to investors

THE PRINCIPAL FINANCIAL GROUP

711 High St.
Des Moines, IA 50309
Contact: Dan J. Fitzgerrell, Director-Pension Operations, (515) 247-6791

Total real estate portfolio assets: $9.4 billion
Total pension fund real estate assets: $7.1 million in general account; $98 million in real estate separate account
Pension fund real estate clients: 1,607
Asset breakdown: 17% office, 67% industrial, 16% retail
Participation offered: Open-end real estate separate account - ownership
Geographic diversification: National
Minimum investment: None
Return on investment: Cumulative - 8.82% 5 year period ending 12/31/87; latest annual - 6.61%
Fee: 0.96% annual investment fee on real estate separate account

PROPERTY CAPITAL ASSOCIATES

200 Clarendon St.
Boston, MA 02116
Contact: Thomas J. Mizo, VP, (617) 536-8600

Total real estate portfolio assets: $760 million
Total pension fund real estate assets: $760 million
Pension fund real estate clients: 50
Asset breakdown: 35% office, 7% industrial, 17% retail, 27% hotel, 14% residential
Participation offered: Publicly-traded REITS, closed-end funds, separate accounts
Geographic diversification: 20% East, 38% Central, 20% West, 22% South
Minimum investment: $1 million
Return on investment: 21.6% for past 10 years (1978 - 1987); latest annual - 9.1% (income)
Fee: Performance-based

THE PRUDENTIAL ASSET MANAGEMENT CO.

19 Prudential Plaza
Newark, NJ 07101
Contact: Robert Bowen, Sr. VP, (201) 877-9298

Total real estate portfolio assets: $36.5 billion
Total pension fund real estate assets: $12.8 billion
Pension fund real estate clients: 324 in tax-exempt separate accounts
Asset breakdown: 50.1% office, 15.5% industrial, 16.6% retail, 9.3% hotel, 6.5% residential, 1.2% land, 0.8% timber
Participation offered: PRISA and PRISA II open-end real estate equity funds. PRACE-I and PRACE-II closed-end equity accounts. PRIMOR and MORISA participating mortgage accounts, PRIMOR being invested only in properties constructed with union labor. Newest product Union Mortgage Account (UMA), being marketed to Labor-Management Trusts, will invest in construction, forward commitment and fixed rate loans on properties built or improved with union labor

Geographic diversification: National
Minimum investment: Varies. For PRISA, none.
Return on investment: Cumulative - for PRISA since inception 7/31/70, 478%; latest annual - for the year ended 12/31/87 5.64%
Fee: PRISA: 1.15% first $50 million, 1% next $100 million, 0.80% thereafter; minimum annual fee after the first full year of participation, $15,000

PSI INSTITUTIONAL REALTY
1015 Grandview Ave.
Glendale, CA 91201
Contact: Nori Gerardo, Sr. VP, (818) 244-8080

Total real estate portfolio assets: $2.4 billion
Total pension fund real estate assets: $722 million
Pension fund real estate clients: 120
Asset breakdown: 100% industrial
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $250,000
Return on investment: Available on request
Fee: 8% of cash from operations until investors receive amounts equal to their initial capital contribution. Thereafter, 25% of proceeds of sales after investors have received amounts from all sources equal to their original contribution

THE RECORP COS.
7000 E. Shea Blvd., Suite 250
Scottsdale, AZ 85254
Contact: Peter M. Gooding, Exec. VP, (602) 991-2288

Total real estate portfolio assets: $250 million
Pension fund real estate clients: 2 large institutional accounts, numerous small/individual pension plans
Asset breakdown: 100% land
Participation offered: Separate accounts, direct investments
Geographic diversification: Phoenix, Ariz.; Albuquerque, N.M.; Nashville, Tenn.
Minimum investment: $500,000
Fee: Not provided

RHODE ISLAND HOSPITAL TRUST NATIONAL BANK
1 Hospital Trust Plaza
Providence, RI 02903
Contact: Dan A. Woolley, VP, (401) 278-7606

Total real estate portfolio assets: $33 million
Total pension fund real estate assets: $10 million
Pension fund real estate clients: 16
Asset breakdown: 26% office, 74% industrial
Participation offered: Open-end
Geographical Diversification: Northeast and Midwest
Minimum investment: $10,000
Return on investment: Cumulative - 10.5% (12/81 to 3/88); latest annual - 1.82% (1/87 to 12/87)
Fee: 1.125% of net asset value per year billed quarterly

ROSEN ASSOCIATES
333 Jericho Turnpike
Jericho, NY 11753
Contact: Robert A. Rosen, Pres., (516) 822-5350

Total real estate portfolio assets: $300 million
Total pension fund real estate assets: $100 million
Pension fund real estate clients: 4
Asset breakdown: 5% office, 90% retail, 5% residential
Participation offered: Separate accounts, private investments
Geographic diversification: National
Minimum investment: $250,000
Return on investment: Varies from 9% to 17%
Fee: Negotiated

RREEF
875 N. Michigan Ave., Suite 4114
Chicago, IL 60611
Contact: Stanislaw Maliszewski, Partner, (312) 266-9300

Total real estate portfolio assets: $3.5 billion
Total pension fund real estate assets: $3.5 billion
Pension fund real estate clients: 87
Asset breakdown: 30% office, 36% industrial, 34% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Not provided
Fee: 1.2% on lower of cost or market, plus 4% of rental income. Fee includes property management services

FRANK RUSSELL TRUST CO.
645 Madison Ave.
New York, NY 10471
Contact: Virginia P. Sirusas, Sr. VP Marketing, (212) 486-7744

Total real estate portfolio assets: $296.8 million in commingled funds
Total pension fund real estate assets: $296.8 million
Pension fund real estate clients: 70
Asset breakdown: 38% office, 23% industrial, 22% retail, 3% hotel, 3% residential, 11% land for future development
Participation offered: Equity funds, open-ended funds, pooled real estate funds
Geographic diversification: 31% East, 38% West, 21% South, 10% Midwest
Minimum investment: $5 million
Return on investment: Cumulative - 2% (gross); latest annual - 9.3%
Fee: 1.5%

SCHRODER REAL ESTATE ASSOCIATES
437 Madison Ave.
New York, NY 10022
Contact: John E. Emmanuel, Sr. VP, (212) 486-9800

Total real estate portfolio assets: $1.3 billion
Total pension fund real estate assets: $1 billion
Pension fund real estate clients: 82 (11 domestic, 71 international)
Asset breakdown: 56% office, 44% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: 63% East, 7% Midwest, 17% South, 13% West
Minimum investment: $2 million
Return on investment: Cumulative - 17.8% (8 yrs. 1980 - 1987); latest annual - 19.4%
Fee: Varies

SENTINEL REAL ESTATE CORP.
1290 Avenue of the Americas
New York, NY 10104
Contact: Lewis Kresch, Sr. VP, (212) 408-2962

Total real estate portfolio assets: $1.3 billion
Total pension fund real estate assets: $1.1 billion
Pension fund real estate clients: 150
Asset breakdown: 7% office, 2% industrial, 10% retail, 81% residential
Participation offered: Open-end fund, closed-end funds and separate accounts
Geographic diversification: 1% East, 12% Midwest, 37% West, 39% Southeast, 12% Southwest
Minimum investment: $250,000 (open-end); $1 million (closed-end), $100 million (separate account)
Return on investment: Cumulative - Open-end 8.5% (3/31/88); latest annual - 8.5% before fees (year ended 12/31/87)
Fee: Varies

SMITH BARNEY BIRTCHER REALTY ADVISORS
27611 La Paz Road
Laguna Niguel, CA 92677
Contact: Stanley L. Iezman, Chief Operating Officer, (714) 831-8031, or Ralph E. Heckert, Sr. VP, (212) 603-8918

Total real estate portfolio assets: $2.5 billion
Total pension fund real estate assets: $500 million
Pension fund real estate clients: 20
Asset breakdown: 25% office, 40% industrial, 35% retail
Participation offered: Closed-end funds, separate accounts and other investment advisory services where Smith Barney Birtcher Realty Advisors assumes responsibility for the management of existing portfolios already being managed by other managers
Geographic diversification: National
Minimum investment: $500,000
Return on investment: From 12/31/80 to 12/31/87 19.55%. Real return since 12/30/80 15.3%
Fee: Varies by fund

STANDARD LIFE
45 Sheppard Ave. East
Suite 940
Willowdale, Ont., CN M2N 5W9
Contact: Ed Quigg, Real Estate Manager, (416) 221-5663

Total real estate portfolio assets: $760 million
Total pension fund real estate assets: $50 million
Pension fund real estate clients: 98
Asset breakdown: 43% office, 30% industrial, 27% retail
Participation offered: Open-end funds
Geographic diversification: Canada
Minimum investment: $100,000
Return on investment: Cumulative - 11.25% since inception (5½ years); latest annual - not provided
Fee: Varies

STATE STREET BANK & TRUST CO.
225 Franklin St.
Boston, MA 02110
Contact: Peter Braun, VP, (617) 654-3953

Total real estate portfolio assets: $396.6 million
Total pension fund real estate assets: $396.6 million
Pension fund real estate clients: 23
Asset breakdown: 25% office, 32.8% industrial, 39.9% retail, 2.3% residential
Participation offered: Units of closed-end commingled funds. Any qualified pension or profit sharing trust or any governmental or union retirement plan may participate
Geographical diversification: 14.9% East, 26.1% South, 16.3% Midwest, 42.7% West
Minimum investment: $5 million
Return on investment: Cumulative - 139.62% Fund I (Sept., 82 - March, 88), 55.74% Fund II (Jan., 84 - March, 88), 16.29% Fund III (Sept., 85 -

March, 88), 10.41% Fund IV (Sept., 86 - March, 88), 3.67% Fund V (Dec., 87 - March, 88); latest annual (as of 3/31/88) - 31.54% Fund I, 13.41% Fund II, 6.85% Fund III, 6.69 Fund IV
Fee: 0.75% annually for Fund VI

SUHRCO REAL ESTATE ADVISORS INC.
401 Parkplace, Suite 501
Kirkland, WA 98033
Contact: Edwin C. Suhrbier, Pres., (206) 828-4464

Total real estate portfolio assets: $100 million
Total pension fund real estate assets: $95 million
Pension fund real estate clients: 3
Asset breakdown: 30% office, 70% retail
Participation offered: Real estate management, discretionary and non-discretionary accounts
Geographic diversification: Pacific Northwest
Minimum investment: Varies
Return on investment: Varies
Fee: Negotiated

SUN LIFE OF CANADA INVESTMENT MANAGEMENT LIMITED (SUNIMCO)
200 University Ave.
Toronto, Ontario, Canada M5H 3C7
Contact: Peter A. Salloum, VP, (416) 595-7809

Total real estate portfolio assets: $1.4 billion
Total pension fund real estate assets: $292.3 million
Pension fund real estate clients: 68
Asset breakdown: 30% office, 44% industrial, 26% retail
Participation offered: Open-end pooled fund
Geographic diversification: 30% British Columbia, 7% Alberta, 1% Saskatchewan, 2% Manitoba, 51% Ontario, 6% Quebec, 3% Nova Scotia
Minimum investment: $50,000
Return on investment: Latest annual - 13.24% (as of 12/31/87)
Fee: First $2 million, 0.60%; next $3 million, 0.45%; next $10 million, 0.30%; over $15 million, 0.15%. A servicing fee based on the real estate market value is also charged at the annual rate of 0.96%

TCW REALTY ADVISORS
400 S. Hope St., Suite 600
Los Angeles, CA 90071-2899
Contact: Bruce L. Ludwig, Sr. Partner, (213) 683-4200

Total real estate portfolio assets: $1.5 billion
Total pension fund real estate assets: $1.5 billion
Pension fund real estate clients: 125
Asset breakdown: 34% office, 51% industrial, 12% retail, 3% land
Participation offered: Closed-end commingled funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million commingled funds, $50 million separate accounts
Return on investment: Cumulative - commingled funds 10.4% 4 years, separate accounts 10.2% 4 years; latest annual - commingled funds 7.6%, separate accounts 10.0%
Fee: First year 1.2% per annum based on contributed capital. Thereafter - 1.2% per annum based on the lower of cost or market value of real estate assets. Incentive - 10% of excess after investor receives 10% cumulative return.

THIRD NATIONAL BANK
(Suntrust Employee Benefit Real Estate Fund)
424 Church St.
Nashville, TN 37244
Contact: Dick Moser, (615) 748-4391

Total real estate portfolio assets: $650 million
Total pension fund real estate assets: $45 million
Pension fund real estate clients: 150
Asset breakdown: 43% industrial, 31% retail
Participation offered: Open-end
Geographic diversification: Southeast U.S.
Minimum investment: $100,000
Return on investment: Cumulative - 8.3% last 12 months ending 3/31/88; latest annual - overall return 10.88%, real estate net of cash 12.2%
Fee: 1.25% of real estate book (cost) annually and 0.25% on cash in fund

THE TRAVELERS CORP.
One Tower Square - 7MS
Hartford, CT 06183
Contact: John L. Prom, Second VP, (203) 277-2997

Total real estate portfolio assets: $17.5 billion
Total pension fund real estate assets: $11.6 billion
Pension fund real estate clients: 162
Asset breakdown: 44.1% office, 10.3% industrial, 9.2% retail, 3.6% hotel, 7.2% timber, 18.5% apartments, 7.1% agriculture
Participation offered: Open-end and closed-end separate accounts — equity, mortgages, balanced (equity and mortgages), agricultural, timberland and individually managed separate accounts.
Geographic diversification: 21.4% South, 30% Midwest, 26.9 East, 21.7% West
Minimum investment: Separate account R-equity, debt, balanced - $100,000; Separate account T-1 - $1 million; Individually managed separate account - $50 million
Return on investment: Varies
Fee: Separate Account R-Equity, Debt, Balanced - 1.00% annual fee. Separate Account T-1 - 1.25% annual fee. Individually managed separate account - negotiated

TRIDENT/MEYER REAL ESTATE ADVISORS
888 S. West St., Suite 500
Anaheim, CA 92802
Contact: Sidney Hansen, Pres., (714) 999-6811

Total real estate portfolio assets: $220 million
Total pension fund real estate assets: $220 million
Pension fund real estate clients: 5
Asset breakdown: 30% office, 14% industrial, 45% retail, 11% mixed-use
Participation offered: Closed-end commingled funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Cumulative: 13% per annum (3 yrs.); latest annual - 13.9%
Fee: 1% of the acquisition cost of the properties. A performance based disposition fee for each property sold equal to 10% cumulative, noncompounded return will also be charged

UNITED BANK OF DENVER
Real Estate Investment Services 0091
United Bank Center
1740 Broadway
Denver, CO 80217
Contact: Cheri Whalen, Asst. VP, (303) 863-6397

Total real estate portfolio assets: $35 million
Total pension fund real estate assets: $12 million
Pension fund real estate clients: 20
Asset breakdown: 20% industrial, 70% retail, 10% unimproved land
Participation offered: Open-end fund, separate account
Geographic diversification: Colorado
Minimum investment: $10,000 for fund
Return on investment: Cumulative - 33% (8/84 - 8/87); latest annual - 10% (as of 8/31/87)Fee: Negotiated

U.S. FIDELITY
624 N. Good-Latimer
Dallas, TX 75204
Contact: Roger King, Pres., (800) 451-0202

Total real estate portfolio assets: $300 million
Total pension fund real estate assets: Not available
Pension fund real estate clients: 5
Asset breakdown: 20% retail, 80% land
Participation offered: Separate accounts
Geographical diversification: Southwest United States
Minimum investment: $500,000
Return on investment: Varies
Fee: 25 basic points to hold purchase and sale fees and all out of pocket extras

UNITED TRUST FUND
4770 Biscayne Blvd.
Miami, FL 33137
Contact: Fred Berliner, Sr. VP, (305) 576-7711

Total real estate portfolio assets: $180 million
Total pension fund real estate assets: $180 million
Pension fund real estate clients: 4
Asset breakdown: 35% office, 35% industrial, 15% retail, 15% manufacturing
Participation offered: Closed-end
Geographic diversification: National
Minimum investment: Fund closed for new investment
Return on investment: Not available
Fee: Negotiated

REPRINTS AVAILABLE

You can order reprints of any article in this magazine in our standard format or customized to your specifications.

Minimum order: 100.

For more information, contact the Editor, (404) 256-9800.

PENSION WORLD

CCi

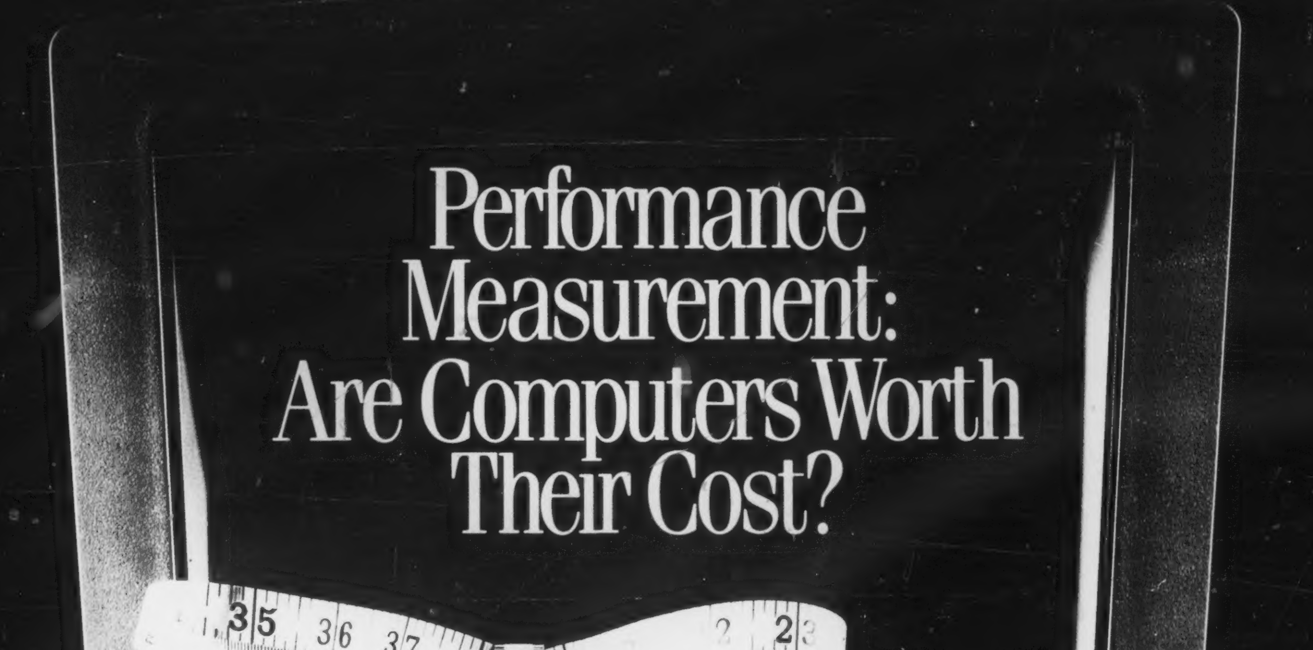
A Publication of Communication Channels, Inc

The Role Of Claims-Paying Ratings

PENSION WORLD®

Investment Managers • Plan Sponsors • Employee Benefits

October 1988



Performance Measurement: Are Computers Worth Their Cost?

Employee Benefits: How The Economy Affects Employers And Employees

Investment Managers
• Plan Sponsors •
Employee Benefits

A Publication Of
Communication Channels, Inc.

PENSION WORLD

October 1988
Volume 24 Number 10

About The Cover: To increase productivity and measure performance, pension administrators are increasing their use of computers.

Photograph by Jerry Hoy, Double Vision Inc., Atlanta.

COLUMNS

Letters 8
Insights 10
New York Update 12
Washington Update 14
Investments 57
Benefits 59
Plan Design 62
Cases & Rulings 64
Guest Viewpoint 66

DEPARTMENTS

Editor's Notes 6
World News 48
News Briefs 52
Executive Suite 53
Resources 54
Calendar 55
Technology Review 56

EMPLOYEE BENEFITS

How The Economy Affects Employers And Employees 16
By Herbert V. Kaighan
Retirement benefits are directly related to wages.

Performance Measurement: Are Computers Worth Their Cost? 20
By Donald B. Bishop
Computer power can be harnessed to deliver the same kinds of benefits that have been achieved in other business functions.

INVESTMENTS

Index Funds Can Add Value To A Pension Portfolio 26
By Phyllis Feinberg
The combination of a passive strategy with an active implementation is becoming a popular use of index funds.

The Role Of Claims-Paying Ratings 30
By Weston M. Hicks
Ratings indicate the likelihood of a punctual payment.

Forum Exposes Thorny Trading Issues Among Public Plans 34
By Kathleen N. Crighton
Pension-fund and investment-management executives debate their differences on several key issues.

Editorial Board Members Address Future Of Government Policy 38
By John D. Marsh
PENSION WORLD's Advisory Board suggests the formation of an agency in the executive branch dedicated to pension policy.

High-Yield Bonds Achieve Legitimacy As An Investment 42
By George Klein
High-yield securities have become an accepted means of rounding out investment portfolios.

Foreign Investors Inject New Life Into Securities Market 44
By Caroline A. Baum
A range of players taps the U.S. Treasury market daily.

Pension Funds Discover Venture-Capital Rewards 46
By Paul D. Quadros
Professionally managed venture capital provides investors substantial capital appreciation with manageable risk.

BPA

Pension World is published monthly by Communication Channels, Inc., George E. Fowkes, Chairman of the Board; Jerold France, President; Scott Smith, Secretary; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *Pension World* is a registered trademark of Communication Channels, Inc. © 1988 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates: U.S., 1 year, $44; 2 years, $66; Canada and Mexico, 1 year, $48; Overseas Sea Mail, $64; Overseas Air Mail, $114. Single copies, $3.75. Group rates available. Directory copies: *Pension World* State Retirement Systems Survey (August), $9.95; *Pension World* Real Estate Portfolio Managers Directory (September), $9.95; *Pension World* Directory of Master and Directed Trust Services (December), $9.95; *Pension World* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *Pension World* are not necessarily those of the editors or publisher. Articles appearing in *Pension World* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *Pension World* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *Pension World*, 6255 Barfield Road, Atlanta, GA 30328.

How The Economy Affects Employers and Employees

Retirement benefits are directly related to wages and should maintain a steady relationship as wages respond to competitive pressures.

BY HERBERT V. KAIGHAN, Principal
Mercer Meidinger Hansen, Los Angeles

Herbert V. Kaighan is a principal in Mercer Meidinger Hansen's Los Angeles office, where he works as a specialist in group benefits. Mr. Kaighan earned his bachelor's degree at Immaculate Heart College and his master's degree at California State University at Los Angeles.

Many variables affect benefit costs. While some variables are direct economic elements—taxes, inflation and unemployment—others are indirect variables—demographics, legislation and judicial decisions.

Generally, benefit costs are measured against compensation, which closely follows the country's gross national product (GNP) and consumer price index (CPI). But non-retirement benefit costs, especially life and disability insurance and medical benefits, seem not to parallel general economic trends despite the fact that they have risen relative to the GNP. Indeed, 20 years ago, benefits equaled 12 percent of GNP. Today, benefits equal about 16 percent of GNP.

Through both highs and lows in the economy, benefit costs have skyrocketed during the past three decades. According to the U.S. Chamber of Commerce, overall benefit costs relative to compensation grew from 24 percent in 1959 to 39 percent in 1979, although these costs recently have declined to about 38 percent.

Overall, retirement benefits are directly related to wages and should maintain a steady relationship as wages respond to competitive pressures, technological advances and economic fluctuations. But if this is the case, why have non-retirement benefits grown faster than compensation?

Historically, the rationale has been an employer's desire to provide employees with a form of compensation that escapes taxes. As a result, a better benefits package—life and disability insurance, health care, added vacation and sick leave—has been an attractive alternative to wage increases.

Yet, four other factors are influencing the growth of non-retirement benefits: demographics, inflation, legislation and judicial decisions.

First, America's work force is getting older and living longer. Indeed, it is more expensive to provide health care for a population with older members.

Second, inflation has been part of the problem. Overall, health-care costs continue to spiral against the GNP—during recession and recovery.

Third, the history of benefit legislation reflects numerous attempts to fix the problems associated with health-care costs. The passage of Medicare in 1966 and the health maintenance organization (HMO) act in 1973 are prime examples. There has been a dramatic rise in medical costs since the enactment of Medicare, along with an avalanche of benefits legislation: ERISA, ERTA, TEFRA, REA, DEFRA, COBRA, TRAC and OBRA.

And fourth, the courts are having an ever-increasing impact on benefits, especially on the issue of retiree life and health.

As a result of these influences on non-retirement benefits, more death benefits are now available, with most programs being salary-related. Because of recent tax acts, today's plan design emphasizes keeping eligibility and benefits non-discriminatory in order to protect key employees' and retirees' $50,000 benefit exemption.

Additionally, the number of individuals covered under disability plans has more than doubled during the past 10 years. While the economy affects all disability plans, it especially affects long-term disability. A study conducted by Union Mutual revealed a marked parallel between the incidence rate (the number of claims per 1,000 employees) and inflation/unemployment. According to the study, the number of claims increases in periods of high inflation and high unemployment.

The economy also directly affects the cost of medical benefits. Currently, the cost of medical benefits accounts for 60 percent to 70 percent of a welfare-benefits program. As a percentage of GNP, health-care costs will rise to more than 11 percent in 1988 and are predicted to approach 14 percent of GNP by 1990.

Traditionally, awareness and cost-efficiency have been the bywords for benefit-plan design. Today, these concepts are causing radical change, especially in hospitalization. Employers are continually striving to control utilization, ensure quality and restrain costs through such mechanisms as utilization review, HMOs, preferred provider organizations (PPOs) and plan-design changes. Indeed, employers are requiring employee contributions and benefit cutbacks.

Until mid-1987, these efforts appeared to be paying off. However, during the past six months there appears to be a re-escalation in medical-benefit costs. The cost increases range from 25 percent to 65 percent, depending on geography, industry and plan design.

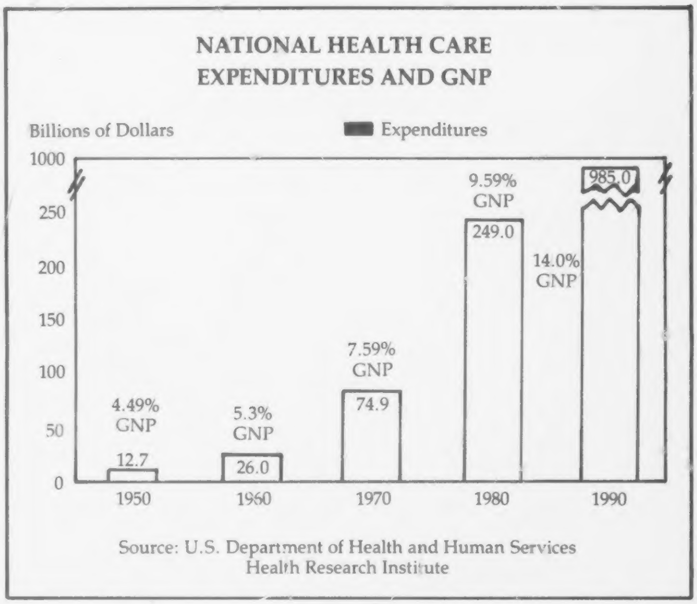
Although hospital occupancy and the average length of stay are falling, plan expenditures are increasing. Outpatient and home care are on the rise, while hospitals appear to be pricing themselves out of the routine health-care market. In fact, 10 percent of the nation's hospitals are expected to go bankrupt within the next few years.

A Mercer Meidinger Hansen survey of chief executive officers of major American corporations on the health-care industry and health-care cost management found that the CEOs believe overwhelmingly that the country still faces a health-care crisis. But the CEOs believe this is a crisis of cost, not quality.

Additionally, the CEOs believe that employers need to work on two fronts to control medical costs: health promotion, wellness and preventive-care programs; and a partnership between government and the private sector to assure affordable medical care for all citizens.

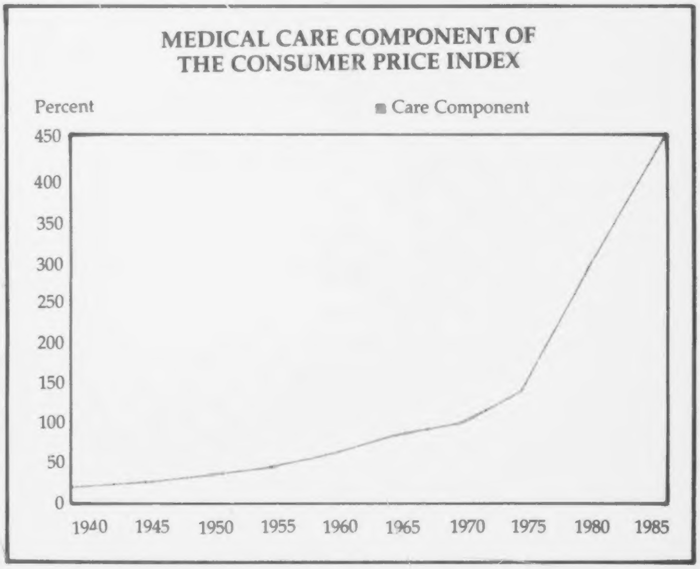
As the result of several court decisions and the direction of the Financial Accounting Standards Board, one of the biggest potential problems facing employers is retiree medical benefits. The questions become, Can employers change them? Will they fund them? Must they report these benefits?

The combined effect of these various influences on non-retirement benefits is changing employers' philosophy from

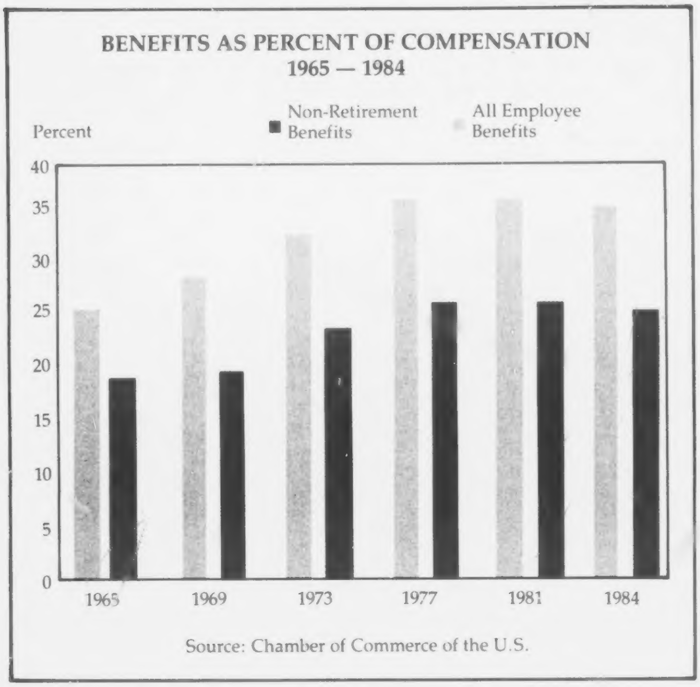


NATIONAL HEALTH CARE EXPENDITURES AND GNP

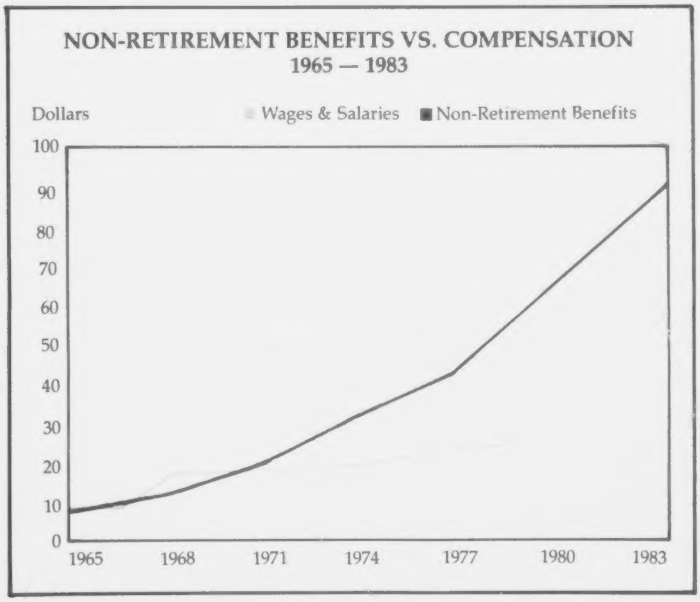
Source: U.S. Department of Health and Human Services
Health Research Institute



MEDICAL CARE COMPONENT OF THE CONSUMER PRICE INDEX


BENEFITS AS PERCENT OF COMPENSATION
1965 — 1984

Source: Chamber of Commerce of the U.S.


NON-RETIREMENT BENEFITS VS. COMPENSATION
1965 — 1983

entitlement to compensation. In general, companies are shifting from defined-benefit plans to defined-contribution plans as they begin to focus on their benefit budget. Indeed, the question is less, What benefits can we provide? than, How much money will we allocate?

The requirements for effective, appropriate benefit design will force employers to track employee data and benefit utilization more carefully and systematically in the future. And emphasis on individual responsibility will require a more enlightened employee-communications strategy. As a result, health-care consumers must be educated in order to become wise buyers.

Because of these changes in philosophy, employees will be asked to share more of the benefit costs. Employees may be ready for this change. Many large corporations have tightened the budget belt in ways that undeniably get attention: eliminating vision and hearing-care plans, suspending special vacation benefits, and modifying overall health-care programs to make employees more aware and responsible.

By having a greater responsibility for cost, more employees will be allowed to customize their benefits package—either through more options or some form of benefit flexibility. Employee surveys conducted after the implementation of flexible-benefits programs indicate an increase in employee appreciation and satisfaction with their benefits.

Total compensation, and the benefits' share of it, is related to productivity as well. Economic reasons, including rising investments, better technology, more schooling and the potential in international trade, lead to thoughts that productivity in the United States is on the rise. If this is the case, it will mean an upward trend in compensation per employee. But whether that brings a further increase in benefits remains to be seen.

While economics dictates benefit philosophy, emerging tax provisions will continue to exert pressure to maintain, if not increase, the share of earnings paid in benefits.

Overall, the economy is a kaleidoscope—an ever-changing mix of variables: inflation, taxation, unemployment, demographics, legislation and judicial decisions. Although benefit programs cannot control economic factors, they can be designed to respond to them effectively. The designers of non-retirement benefit programs must be acutely aware of these influences and of program objectives to ensure that what they intend does in fact take place. ☐

High-Yield Bonds Achieve Legitimacy As A Pension Investment

High-yield securities have become an accepted means of rounding out investment portfolios without seriously endangering the safety of principal.

BY GEORGE KLEIN, Principal and Fixed-Income Portfolio Manager
Kemper Asset Management Co., Chicago

George Klein is a fixed-income portfolio manager and a principal with Chicago-based Kemper Asset Management Co. Mr. Klein holds a BA in mathematics from Brooklyn College and an MBA in finance from the New York University Graduate School of Business.

It is no secret that high-yield securities can be a risky investment. Indeed, the term "junk bond" recently has been used to symbolize the high-yield, low-grade segment of the bond market. Yet, high-yield bonds have become a legitimate means of rounding out investment portfolios without seriously endangering the safety of principal.

Moreover, many companies are now amenable to having portfolio managers invest in high-yield securities for their pension portfolios. And these high-yield investments are allowing firms to benefit from additional income without jeopardizing long-term pension needs.

Overall, the issuance of high-yield bonds has increased nearly 280 percent since 1985. The size of the high-yield market—$165 billion or nearly 30 percent of all outstanding corporate bonds—dictates that high-yield securities no longer can be ignored. These bonds have become a way of doing business for corporate America.

In the first six months of 1988, the high-yield sector had the highest return among U.S. fixed-income securities, returning 8.2 percent. The investment return was nearly double the return on U.S. government securities during that period and at least 200 basis points more than high-grade corporate bonds and current coupon-mortgage securities.

Additionally, during the past five years, high-yield securities have outperformed the Shearson Lehman Government Corporate Index by approximately 300 basis points.

In addition, investors are encouraged by the increased liquidity of these securities as more Wall Street firms become involved in trading high-yield bonds.

Economic shifts

When putting together a portfolio that includes high-yield bonds, flexibility is of the utmost importance. Without flexibility, long-term investment objectives can be at risk when economic shifts occur.

While other securities in a bond portfolio are driven by interest-rate changes, high-yield bonds—some of which yield 400 to 500 basis points above U.S. treasury bonds—are more dependent on credit developments. As a result, high-yield bonds can provide a cushion against day-to-day or even quarter-to-quarter interest-rate movements. Not only does this give portfolio managers considerable flexibility, it can actually decrease portfolio volatility while increasing income.

By incorporating high-yield bonds into a discretionary portfolio, managers are able to use their closeness to the market to decide when it may be appropriate to be involved with high-yield issues.

To capture the largest benefits offered by high-yield bonds, portfolio managers generally should purchase these securities during the recovery period of an economic cycle and sell them as the economy moves toward a recession.

Generally, the opposite approach should be taken with government securities. Using this strategy, after an increase in interest rates, managers can sell their high-yield holdings and purchase high-grade securities. This allows them to get back to the same position that managers of high-grade securities held all along—at a cheaper price and with additional income from the high-yield securities just sold.

Core position

How does a portfolio manager decide which securities to invest in? In a discretionary portfolio, it is important to maintain a core position of investment-grade issues and select high-yield investments that can be controlled by solid research and comprehensive credit analysis.

In most instances, research and analysis must go beyond looking at corporate balance sheets. Attention must be paid to a company's debt schedule and fixed costs, the firm's cash-generating capability and its competitive position within the industry. And all these factors must be taken in the context of an industry's position in the business cycle.

Portfolio managers must be selective in the high-yield area. This selectivity involves investing in more liquid issues, typically more than $100 million in size, and in industries that are showing strength, such as container and cable businesses in the current market.

Risk also can be further controlled by industry and issue diversification. Limiting purchases of a single security to no more than 5 percent of the portfolio value is good discipline.

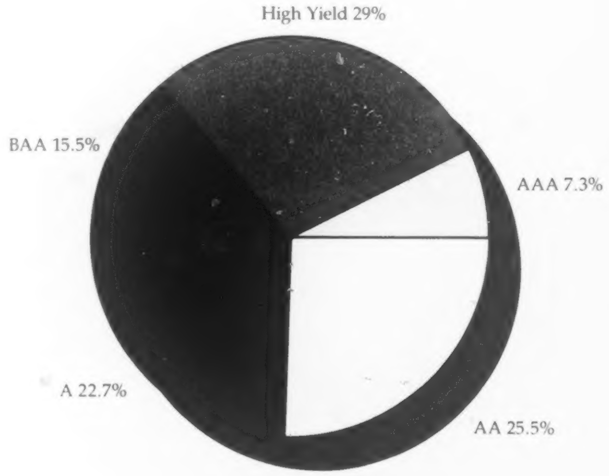
Simple as possible

Additionally, a portfolio of high-yield securities should be kept as simple as possible. Credit risk and maturity should be clearly defined, and complex mortgage-backed issues, as well as high-yield bonds with uncertain put-option and call-option risks, should be avoided.

Moreover, portfolio managers must be aware of economic shifts that could affect the high-yield market. They must also keep close tabs on individual securities. By combining high-yield and high-grade securities into a single portfolio, managers have the flexibility to move from one asset class to another, especially during changes in the economy. And if a high-yield security appears to be faltering, it may be best to sell that security immediately.

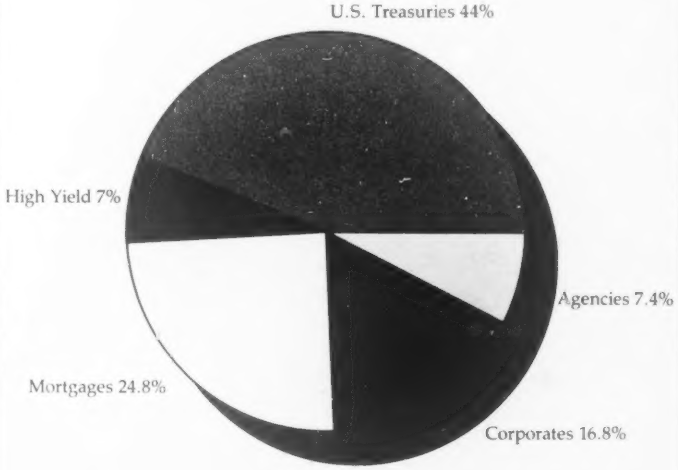
By keeping investments simple and making a commitment to solid research, high-yield securities can be expected to continue to play a profitable role in long-term pension investing. ☐

U.S. CORPORATE BOND MARKET
($550 Billion)



Source: Shearson Lehman Brothers Inc.

U.S. PUBLIC BOND MARKET
($2,300 Billion)



Source: Shearson Lehman Brothers Inc.

Bankruptcies Provide New Opportunities

BY WILBUR L. ROSS JR.
Senior Managing Director
Rothschild Inc.
New York

When Texaco filed for bankruptcy on April 12, 1987, the California and Pennsylvania Public Employees Retirement Systems, two of the nation's largest pension funds, began to make history along with the Texaco case. In fact, the funds helped settle the Texaco-Pennzoil litigation by convincing Texaco management to broaden shareholders' decision-making powers and worked to provide pension funds with access to Texaco's director-nominating process.

In doing so, the two pension funds crystalized a radical change that quietly has been taking place in institutional shareholding: Pension funds are assuming a critical role in shaping corporate-governance policy.

Taking control

Today, pension funds are less willing to be passive investors and to let their investment managers vote routinely in favor of management on corporate-governance issues. Pension funds are taking control of their votes and using their considerable influence to maximize shareholder value.

One way pension funds are doing this is by acting as the swing vote in proxy fights, such as the one that took place when Coniston Partners unsuccessfully attempted to take control of Gillette.

Another is by initiating proxy fights over the critical issue of shareholder democracy. In such fights, pension funds often have been backed by the Council of Institutional Investors. This happened during the recent annual meetings of Honeywell, Upjohn, Phelps Dodge and several other large companies.

But the pension funds' newest weapon is the equity committee appointed in each major Chapter 11 bankruptcy case.

Increasingly, Chapter 11 has become an important corporate finance tool. The strategy has been used when a company's basic business is viable, but liability for a specific product or action requires extraordinary protective measures. The equity committee, in turn, has become the focal point of activity for the financial restructuring.

Equity committees usually comprise the seven holders of the most equity who are willing to serve. Typically, a committee arms itself, at the bankrupt company's expense, with lawyers, investment bankers and accountants. These professionals guide a committee through the legal and financial issues, analyze information, outline and recommend courses of action, and implement committee decisions.

Due to their official status and the support of their advisors, equity committees can function as shadow boards, formulating positions on all key issues, including management and board composition of the reorganized company, the resulting capital structure and what businesses or assets should be divested.

The equity committee in the Texaco case concluded that management might try to escape the $11 billion Pennzoil judgment by appealing to the U.S. Supreme Court. Upon analysis of the probability that the decision would be overturned and the financial implications if it was not, the committee concluded that a $3 billion settlement was preferable to "betting the ranch."

The committee's chairman and his advisors met privately with Pennzoil and negotiated the $3 billion settlement, which ultimately was accepted by the creditors and Texaco. The committee, with the significant and unique contributions made by the California and Pennsylvania retirement funds, also convinced Texaco's board of directors to remove certain obstacles that were severely limiting shareholder rights and to adopt an anti-greenmail resolution.

Ultimately, Texaco not only agreed to endorse the committee's position on the issues but also to finance more than $1 million in proxy solicitation expenses related to the committee's efforts to win shareholder votes. Both actions were unprecedented for U.S. corporations.

Equity-committee influence

An equity committee's bold actions can enhance stock prices. Indeed, The Charter Co. made several divestitures and arranged for another company to fund the plan of reorganization by purchasing control. And by working with an outside firm to find a competing bidder, the stock price was driven up.

In the Revere Copper & Brass Co. case, analysis showed that the liquidating value of the company was substantially greater than the market price. Therefore, the equity committee successfully insisted that any stock issued in satisfaction of debt should be at a large premium over the market price.Six months after confirmation, Revere was sold at a price above its highest price during the past 10 years.

In the case of A.H. Robins, management wanted to leverage the company to the hilt to pay the Dalkon Shield claims and re-emerge as an independently traded company. However, the equity committee decided to maximize values by selling Robins to a major pharmaceutical company that would benefit both from operating synergies and from the tax credits created by the $2.5 billion Dalkon payment. When management filed its plan with the Supreme Court, the equity committee announced that it opposed

HOW EQUITY COMMITTEES HELPED STOCKHOLDERS ACHIEVE HIGH RATES OF RETURN DURING BANKRUPTCIES

	Price at start of bankruptcy	Price at end of bankruptcy	% Gain	Case Duration	Compound Annual % Return
The Charter Co.	$2.50	$4.00	60%	2.66 yrs.	19%
Revere Copper & Brass Co.	4.875	13.625	179	2.75	45
A.H. Robins Co.*	5.50	25.75	368	2.92	45
Salant Corp.	3.875	11.25	190	2.25	61
Texaco Inc.	27.375	47.25	73	1.00	73

Source: Rothschild Inc.

*Appeal pending.

the proposal and would conduct its own auction of the company. Two weeks later, American Home Products won the bidding and paid the stockholders $200 million more than management's proposal.

And in the Salant Corp. case, the equity committee convinced creditors to exchange debt for equity at a substantial premium over the market price and to provide lenient covenants on the surviving long-term bonds. Less than a year after confirmation, Salant was strong enough to acquire Manhattan Industries.

Corporate governance also was substantially improved in the Texaco bankruptcy, where the California and Pennsylvania retirement funds were actually represented on the equity committee. In the case of Robins, two institutional investors informally supported the committee, and the Belzberg interests were represented on the Revere committee.

Pension participation

Since committee participation can create such important economic and shareholder democratization benefits, why aren't more pension funds on committees? There are several answers.

One reason is that many institutions worry that insider information inherent in committee membership might preclude trading because no safe-harbor rules have been promulgated by the Securities and Exchange Commission (SEC). In attempting to deal with this problem, the Council of Institutional Investors met with senior SEC staff members who agreed to recommend to the full committee that Rule 14e-3 be extended to Chapter 11 committees.

This rule provides that a "Chinese Wall" between the party possessing inside information and the investment decision-makers will permit continuation of normal investment decision-making. This is a major breakthrough and is expected to eliminate the largest single barrier to institutional membership. Even before issuance of the release, many money managers will be comforted by knowledge of the staff's informal position.

Several factors mitigate the exposure. First, there is a protection inherent in the fact that all committee actions are part of a court proceeding. Second, in any major decision, a committee relies on the recommendations of advisors. And third, while committees have tremendous practical power, they cannot bind their constituents on major issues such as the terms of a plan for reorganization.

A plan normally requires the affirmative vote of the holders of two-thirds of the voting stock. The committee merely makes a recommendation. Also, a committee's counsel would defend members against any litigation arising from official committee activities. The consensual plans of reorganization typically absolve members from liability for their actions in the proceedings. For these reasons, fear of litigation usually is unfounded.

One unique problem

Yet, public pension funds do have one unique problem. The Bankruptcy Code limits committee membership to individuals. Governmental entities are excluded. The original purpose was to keep taxing authorities off committees, because they already have special status under the Bankruptcy Code. But nothing in the legislative history indicates that public pension funds were intended as targets.

In the Texaco case, Judge Howard Schwartzberg ruled that the California and Pennsylvania funds could serve as ex-officio or nonvoting members of the equity committee. They did serve—with great influence and distinction. However, ex-officio status has been denied to the Pennsylvania fund by the U.S. Trustee in the Allegheny International case.

Somewhat at odds with the Allegheny case, in the Public Service of New Hampshire bankruptcy, an investment advisory firm with public-employee pension-fund accounts has become a full voting member of the committee. While this precedent might provide a means for achieving at least indirect participation even before legislative relief is attained, currently ex-officio status may be all that is directly available to public pension funds.

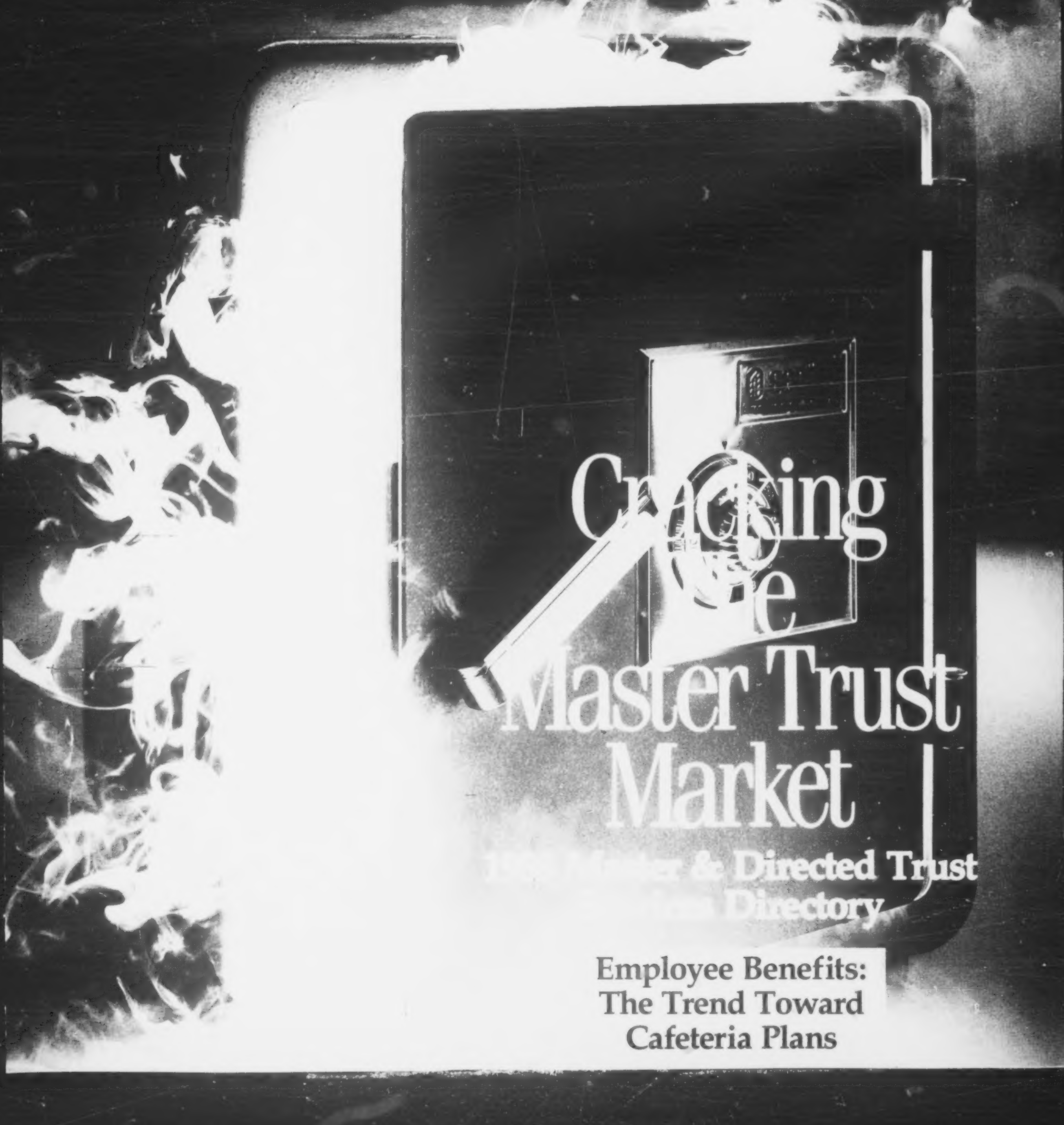
To clarify matters, the Council of Institutional Investors is crafting language that would redefine "person" to include public pension funds for inclusion in a pending legislative initiative regarding Chapter 9—the municipal bankruptcy section.

Once funds have exercised shadow-board powers in Chapter 11 proceedings, there is no conceptual reason why funds should not become principal participants in the takeover battles now being fought. Why shouldn't a pension fund make strategic investments, either in direct support of a takeover bid, in support of a defensive restructuring or a management leveraged buyout? In many cases, such intervention would not only make economic sense but also social and political sense. The barriers are a mind-set, organization and perception. All the barriers can be dealt with, and all can change. ☐

Wilbur L. Ross Jr. is senior managing director of New York-based Rothschild Inc., where he is responsible for the corporate finance department. Mr. Ross has advised the equity or creditor committees of Allis-Chalmers, The Charter Co., Continental Airlines, Public Service of New Hampshire, Revere Copper & Brass Co., A.H. Robins and Texaco. He is a graduate of Yale and Harvard Business School.

PENSION WORLD®

Investment Managers • Plan Sponsors • Employee Benefits • [illegible]ember 1988



Cracking the Master Trust Market

1988 Master & Directed Trust [illegible] Directory

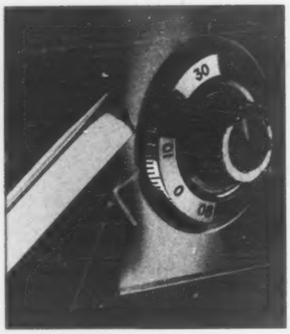
Employee Benefits: The Trend Toward Cafeteria Plans

Investment Managers
• Plan Sponsors •
Employee Benefits

A Publication Of
Communication Channels, Inc.

PENSION WORLD

December 1988
Volume 24 Number 12



About The Cover: Technology will play an important role in the master trust market in the future. Our cover story begins on page 30.

Photograph by Jerry Hoy, Double Vision Inc., Atlanta.

INVESTMENTS

Financial Futures Program Requires Accurate Data 14
By Kathleen McGrath
A futures investment's performance must be measured over time.

Undervalued Stocks Offer Opportunities For Investors 16
By Benjamin Brewster
Out of favor stocks often can be safe bets.

1988 Master & Directed Trust Services Directory 18
By PENSION WORLD Staff
This listing contains firms that offer master or directed trust services, as well as their policies for such services.

Cracking The Master Trust Market In The 1990s 30
By Thomas A. Szczesny
To benefit from technology, pension plans must understand relationships with master trusts and custodians.

Custodians Need To Address Global Investing Concerns 36
By Thomas J. Lucey
Settlement systems have been straining to meet the requirements of institutional investors.

Fidelity Investments: More Than Just Mutual Funds 38
By Karen Kutz
The firm's institutional products might eventually surpass its retail products in fame.

EMPLOYEE BENEFITS

PENSION WORLD Salutes Five Industry Leaders 42
By Steven E. Schanes
The leaders are the recipients of the magazine's Employee Benefit Awards for 1988.

The Trend Toward Cafeteria Plans 46
By David L. Brenneman
Flexible-benefit programs offer choices to employees.

Guidelines Offered For Automating Administration 51
By Donald B. Bishop
Automation can help administration run more efficiently.

COLUMNS

Insights 8
New York Update 10
Washington Update 12
Investments 58
Plan Design 60
Benefits 64
Guest Viewpoint 66

DEPARTMENTS

Editor's Notes 6
World News 53
News Briefs 55
Calendar 56
Executive Suite 57

BPA

PENSION WORLD (ISSN #0098-1753) is published monthly by Communication Channels, Inc., Jerrold France, President; Lawrence Moores, Executive Vice President; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *PENSION WORLD* is a registered trademark of Communication Channels, Inc. © 1988 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates. U.S., 1 year, $44; 2 years, $66; Canada and Mexico, 1 year, $48; Overseas Sea Mail, $64; Overseas Air Mail, $114. Single copies, $3.75. Group rates available. Directory copies: *PENSION WORLD* State Retirement Systems Survey (August), $9.95; *PENSION WORLD* Real Estate Portfolio Managers Directory (September), $9.95; *PENSION WORLD* Directory of Master and Directed Trust Services (December), $9.95; *PENSION WORLD* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *PENSION WORLD* are not necessarily those of the editors or publisher. Articles appearing in *PENSION WORLD* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *PENSION WORLD* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *PENSION WORLD*, 6255 Barfield Road, Atlanta, GA 30328.

1988 Master And Directed Trust Services Directory

This directory lists firms that offer master or directed trust services, as well as their policies for such services.

The information contained in the 1988 Directory of Master and Directed Trust Services was compiled by Barbara Katinsky, managing editor of the directory department, and Vanessa Brown, listings editor.

The PENSION WORLD Directory of Master and Directed Trust Services is a listing of firms indicating that they offer master and/or directed trusts. This is not an exhaustive list, but rather an identification of firms that responded in full to the magazine's questionnaire on master and directed trusts.

Master trust is defined in many individual ways by the banks and trust companies that offer this service. A technical definition of a master trust, according to several industry authorities, is a trust in which multiple plans of the same company control or share investment experience under one trust document.

In working terms, however, some of the definitions of master trust include: an arrangement under one trust agreement that includes multiple money managers, one of which may or may not be the trustee; a pooling of one sponsor's assets, which may include multiple managers and one or more plans, under one trust document; or a pooling of directed trusts.

Similarly, several different definitions are given to the term directed trust. The general definition is a trust under which the trustee has less than full managerial authority of the plan sponsor's assets.

However, the term directed trust often is used synonymously with directed portfolio, in which a manager has the authority to direct only those investments within the particular portion of assets under his/her direct control. Also, the term directed trust is sometimes associated with general trust, in which a separate trust agreement is written for that portion of assets under the manager's control.

The figures in the following listings are not always comparable, although PENSION WORLD has taken precautions to present the data in its most accurate form. All information in the directory was provided by the banks and trust companies listed. PENSION WORLD assumes no responsibility for the accuracy of the information presented in the listings.

AMERICAN NATIONAL BANK
Fifth & Minnesota Streets
St. Paul, MN 55101
Contact: John P. Klett, VP, (612) 298-6004

Number of separate master trust clients: 0
Number of directed trust clients: 10
Master trust assets: 0
Directed trust assets: $70 million
Custodial employee benefit assets: 0
Total employee benefit assets: $150 million
Number of separate portfolios: 12
Average number of accounts per account supervisor: 125
Average number of portfolios per investment manager contact: 60
Accounting system utilized: Contractual settlement date
Fail float credit provided: No
Short-term instruments used: Money Market Fund, CD, GIC, Short Term Government, Commercial Paper, Repos
Date short-term interest credited: First business day following month end
Timeliness of reporting package: Within 10 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, index fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

AMERITRUST CO., N.A.
900 Euclid Ave.
Cleveland, OH 44101-0937
Contact: Gary W. Queen, Sr. VP, (216) 687-4089

Number of separate master trust clients: 45
Number of directed trust clients: 14
Master trust assets: $13.763 billion
Directed trust assets: $416 million
Custodial employee benefit assets: 0
Total employee benefit assets: $13.736 billion
Number of separate portfolios: 106
Average number of accounts per account supervisor: 12
Average number of portfolios per investment manager contact: 25
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, actual delivery date
Fail float credit provided: Yes
Short-term instruments used: STIF, variable demand notes, T-bills, commercial paper, Eurodollar CDs, CDs & financial reserves fund
Date short-term interest credited: Fifth business day
Timeliness of reporting package: 3-5 business days after month end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, TUCS, Americscan (on-line client inquiry), investment management services
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

BANCOKLAHOMA TRUST CO.
P.O. Box 2300
Tulsa, OK 74192
Contact: Jim Morris, VP & TO, (918) 588-6448

Number of separate master trust clients: 35
Number of directed trust clients: 84
Master trust assets: $731 million
Directed trust assets: $1.2 billion
Custodial employee benefit assets: $438 million
Total employee benefit assets: $1.6 billion
Number of separate portfolios: 120
Average number of accounts per account supervisor: 23
Average number of portfolios per investment manager contact: 17
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment
Fail float credit provided: No
Short-term instruments used: Yes
Date short-term interest credited: First business day of the month
Timeliness of reporting package: 15 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

BANK IV WICHITA, N.A.
P.O. Box 4
Fourth Financial Center
Wichita, KS 67201-0004
Contact: Roger A. Ramseyer, Trust Marketing Mgr., (316) 261-4555

Number of separate master trust clients: 5
Number of directed trust clients: 70
Master trust assets: $92 million
Directed trust assets: $191.340 million
Custodial employee benefit assets: $380.269 million
Total employee benefit assets: $380.269 million
Number of separate portfolios: 70
Average number of accounts per account supervisor: 18
Average number of portfolios per investment manager contact: 18
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date, actual delivery date
Fail float credit provided: Yes
Short-term instruments used: Shearson Temp Fund, Shearson Treasury Fund, Bank IV Money Market Fund
Date short-term interest credited: First of each month
Timeliness of reporting package: 15th of month
Services provided: Performance measurement, portfolio analysis, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement, direct access terminal for on-line account inquiry
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

THE BANK OF NEW YORK
48 Wall St.
New York, NY 10015
Contact: Roy Lanza, VP, (212) 495-1784

Number of separate master trust clients: 107
Number of directed trust clients: Included in the MT figures
Master trust assets: $43.684 billion
Directed trust assets: Included in the MT figures
Custodial employee benefit assets: $54.1 billion
Total employee benefit assets: $97.784 billion
Number of separate portfolios: 107
Average number of accounts per account supervisor: 10
Average number of portfolios per investment manager contact: 25
Accounting system utilized: Trade date (full accrual), actual delivery date
Fail float credit provided: Yes
Short-term instruments used: STIF portfolios, master notes, bank deposit reserves, direct investments, mutual funds, or any client-directed vehicle
Date short-term interest credited: Accrued daily, posted second business day of each month
Timeliness of reporting package: Next day through on-line, 3-5 business days in hard copy
Services provided: Performance measurement, portfolio analysis, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement, integrated global custody, and related services: various accountings, such as equitable accounting, tax lot, amortized cost; complete benefit payment services, on-line account access; PC-driven Report Enhancer; on site training; consulting
Policy for crediting dividends and interest: On payable date for domestic, as received — for foreign and private placements
Fee structure: Based on individual services performed

BANK ONE, DAYTON, N.A.
40 N. Main St.
Dayton, OH 45401
Contact: Donald G. Middendorf, VP, (513) 449-8659

Number of separate master trust clients: 9
Number of directed trust clients: 80
Master trust assets: $424 million
Directed trust assets: $450 million
Custodial employee benefit assets: Not Reported
Total employee benefit assets: $613 million
Number of separate portfolios: 170
Average number of accounts per account supervisor: 40
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: Yes
Short-term instruments used: STIF, T-bills, commerical paper, money market funds
Date short-term interest credited: Month end
Timeliness of reporting package: Five business days
Services provided: Performance measurement, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, real estate fund, GIC fund, zero benefit disbursement, Sweep
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

BANKERS TRUST CO.
280 Park Ave., 8 West
New York, NY 10017
Contact: Frederik L. Bailey, VP, (212) 850-2037

Number of separate master trust clients: Not Reported
Number of directed trust clients: Not Reported
Master trust assets: $135.5 billion
Directed trust assets: $128.4 billion

Custodial employee benefit asset value: $35.5 billion
Total employee benefit asset value: $176.8 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, with both contractual settlement date and trade date reporting
Fail float credit provided: Yes
Short-term instruments used: Directed STIF, STIF Plus, Super STIF, Welfare Plan STIF, Government Securities STIF, Governmental Plan STIF, and Common Trust Fund STIF (Non-ERISA assets)
Date short-term interest credited: On the last day of the month earned
Timeliness of reporting package: Monthly transaction reports are available in three business days; asset and liability reports, in 7 to 10 business days; and performance measurement reports in 15 business days. All of these reports are available on-line
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, Global custody; on-line access through a PC-based workstation to accounting and performance data, and external data bases; customized reporting and graphics; discount brokerage and soft-dollar fee arrangements, Dividend Reinvestment Program, trade execution monitoring; Regional Trust Offices in Los Angeles, Houston, and London
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

BISHOP TRUST CO., LTD.
P.O. Box 2390
Honolulu, HI 96804-2390
Contact: Dan Zaehring, Sr. VP & Sr. TO, (808) 523-2275

Number of separate master trust clients: 60
Number of directed trust clients: 280
Master trust assets: $130 million
Directed trust assets: $270 million
Custodial employee benefit assets: $270 million
Total employee benefit assets: $390 million
Number of separate portfolios: 270
Average number of accounts per account supervisor: 18 master — 55 directed
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: No
Short-term instruments used: Registered money market funds, T-Bills, CDs, commercial paper
Date short-term interest credited: Accrued daily, paid on second working day
Timeliness of reporting package: Delivered 10 days after month end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, equity and income commingled investment funds, plan administration consulting and design
Policy for crediting dividends and interest: Pay date plus one with good funds
Fee structure: Based on combination of asset value and individual services

BOATMEN'S FIRST NATIONAL BANK OF KANSAS CITY
P.O. Box 419038
Kansas City, MO 64183
Contact: James K. Shineman, Sr. VP, (816) 234-7460

Number of separate master trust clients: 3
Number of directed trust clients: 125
Master trust assets: $68.674 million
Directed trust assets: $228.491 million
Custodial employee benefit asset value: $354.846 million
Total employee benefit asset value: $1.035 billion
Number of separate portfolios: 6
Average number of accounts per account supervisor: 120
Average number of portfolios per investment manager contact: 120
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: No
Short-term instruments used: Not Reported
Date short-term interest credited: First business day of following month
Timeliness of reporting package: 10 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, non-qualified plans, cafeteria plans, collective investment funds
Policy for crediting dividends and interest: On date received
Fee structure: Based on combination of asset value and individual services

BOSTON SAFE DEPOSIT AND TRUST CO.
One Boston Place
Boston, MA 02108
Contact: John L. Carty, Sr VP, (617) 722-7314

Number of separate master trust clients: 47
Number of directed trust clients: 292
Master trust assets: $38.623 billion
Directed trust assets: $839.116 million
Custodial employee benefit assets: $75.996 billion
Total employee benefit assets: $115.5 billion
Number of separate portfolios: 1,163
Average number of accounts per account supervisor: 5
Average number of portfolios per investment manager contact: 5
Accounting system utilized: Trade date (full accrual), actual settlement date
Fail float credit provided: Yes, we distinguish between Clearinghouse and Fed Fund transactions. Cash to settle a purchase is not removed from an account until actually required for payment. This results in the cash remaining invested in the account until needed, thus eliminating the necessity for fail credits.
Short-term instruments used: Yes, Boston Safe maintains a short-term investment fund (STIF) designed specifically for the cash management needs of employee benefit trusts. It is managed prudently to provide minimum risk, maximum liquidity and competitive current returns. The fund is invested in Repurchase Agreements backed by U.S. Government guaranteed collateral, high grade commercial paper, Certificates of Deposit, Banker's Acceptances, and U. S. Treasury and Government Agency short-term obligations. Another short-term instrument is our Reserve Deposit Account (RDA) which is a deposit vehicle rather than an investment vehicle and was developed as an alternative to STIF, for use by institutional funds. RDA is a money market deposit account to which Boston Safe gives a floating rate of interest designed to be competitive with the returns earned by STIF.
Date short-term interest credited: Interest on our short-term funds is calculated and accrued daily and is credited on the third business day of the following month for STIF, and the first business day of the following month for RDA
Timeliness of reporting package: Three to five business days after month-end depending on reports requested
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index funds, market inventory fund, global custody, structured investment products, real estate, active management, on-line access capabilities, master work station, and consulting services
Policy for crediting dividends and interest: On payable date, interest and dividends are credited and available for investment on payable date in the case of federal fund payments or on the next business day following payable date for Clearinghouse payments
Fee structure: Fees are calculated on an individual basis and quoted based upon a determination of the expected costs for the delivery of services required by each client.

CALIFORNIA FIRST BANK (S270)
530 "B" St.
P.O. Box 109
San Diego, CA 92106
Contact: Piet Westerbeek III, VP, (619) 230-3303

Number of separate master trust clients: 4
Number of directed trust clients: 400
Master trust assets: $200 million
Directed trust assets: $500 million
Custodial employee benefit assets: $600 million
Total employee benefit assets: $1.6 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Contractual settlement date
Fail float credit provided: No
Short-term instruments used: Short Investment Fund, four money market funds
Date short-term interest credited: Last day of the month
Timeliness of reporting package: 8-10 business days
Services provided: Performance measurement, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, index fund
Policy for crediting dividends and interest: On payable date in clearinghouse funds
Fee structure: Based on combination of asset value and individual services

CENTERRE TRUST CO.
510 Locust St.
St. Louis, MO 63101
Contact: Richard W. Hibbs, Sr. VP, (314) 436-9265

Number of separate master trust clients: 10
Number of directed trust clients: 125
Master trust assets: $1.6 billion
Directed trust assets: $3.660 billion
Custodial employee benefit assets: $4.189 billion
Total employee benefit assets: $9.538 illion
Number of separate accounts: 290

Average number of accounts per account supervisor: 30 accounts for non-master trust administrator
Average number of portfolios per investment manager contact: 18
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment (system able to support both)
Fail float credit provided: Yes
Short-term instruments used: In-house STIF and various other options such as Federated and Fidelity
Date short-term interest credited: First business day of every month
Timeliness of reporting package: 5-15 business days depending on report
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, portfolio insurance, global custody
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

THE CHASE MANHATTAN BANK, N.A.

1211 6th Ave., 30th Floor
New York, NY 10036
Contact: Hortensia E. Sampedro, VP, (212) 730-6116

Number of separate master trust clients: 122
Number of directed trust clients: 136
Master trust assets: $62 billion
Directed trust assets: $1 billion
Custodial employee benefit assets: $77 billion
Total employee benefit assets: $140 billion
Number of separate portfolios: 2,250
Average number of accounts per account supervisor: 10
Average number of portfolios per investment manager contact: 35
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Domestic and international STIF, master notes, money market
Date short-term interest credited: Month-end
Timeliness of reporting package: On-line daily, monthly/quarterly hardcopy statements seven business days after period end, annual hardcopy statements 30-45 days after year-end
Services provided: Performance measurement, portfolio analysis, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, on-line accounting and reporting, safekeeping, custody accounting, cash management, futures/options accounting, international securities lending
Policy for crediting dividends and interest: On payable date, interest in federal funds, dividends in clearinghouse funds
Fee structure: Based on combination of asset value and individual services

CITIBANK, N.A.

153 E. 53rd St.
New York, NY 10043
Contact: Wolfgang Strauss, VP, (212) 559-1523

Number of separate master trust clients: 34
Number of directed trust clients: 292
Master trust assets: $10.111 billion
Directed trust assets: $18.499 billion
Custodial employee benefit assets: $72.004 billion
Total employee benefit assets: $100.614 billion
Number of separate portfolios: 1,593
Average number of accounts per account supervisor: 6
Average number of portfolios per investment manager contact: 62
Accounting system utilized: Trade date (full accrual), contractual settlement date, actual delivery date
Fail float credit provided: Yes
Short-term instruments used: Liquid reserve fund, short term investment fund, landmark cash reserves, custom short term investment fund, money market deposit account, individual money market instruments
Date short-term interest credited: Mid-month and end of month
Timeliness of reporting package: 5-7 business days following receipt of all information
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, global custody, dividend reinvestment, flexible reporting-CITICORP Portfolio Analyst; Newbridge commission utilization; trustee services for deferred compensation plans (Rabbi Trust)
Policy for crediting dividends and interest: On payable date if paid in federal funds; payable date plus one if paid in clearinghouse funds; credited in good funds immediately available for reinvestment
Fee structure: Based on individual services performed

CITIZENS AND SOUTHERN TRUST CO.

33 North Ave., Suite 990
Atlanta, GA 30303
Contact: J. Dan Davis, VP, (404) 897-4905

Number of separate master trust clients: 51
Number of directed trust clients: 104
Master trust assets: $2.1 billion
Directed trust assets: $2.3 billion
Custodial employee benefit assets: $12.3 billion
Total employee benefit assets: $15.1 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: 10-12
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: Yes
Short-term instruments used: Various
Date short-term interest credited: Month end
Timeliness of reporting package: 10 to 20 days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

THE CONNECTICUT BANK & TRUST CO., N.A.

One Constitution Plaza - MO8F
Hartford, CT 06115
Contact: Paul W. Stadler, VP, Mgr. Mktg. & SLS. (203) 244-5385

Number of separate master trust clients: 27
Number of directed trust clients: 144
Master trust assets: $1.214 billion
Directed trust assets: $801.247 million
Custodial employee benefit assets: $151.151 million
Total employee benefit assets: $2.166 billion
Number of separate portfolios: 311
Average number of accounts per account supervisor: 25 relationships with average of two plans per account
Average number of portfolios per investment manager contact: 27
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: Yes
Short-term instruments used: Commingled short term funds, repurchase agreements, variable interest rate notes, CDs, commercial paper, U.S. Governments
Date short-term interest credited: Monthly, last business day
Timeliness of reporting package: 2-20 business days, depending on type of report
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, South Africa Free Equity Fund, GIC Fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services.

THE CONNECTICUT NATIONAL BANK

777 Main St.
Hartford, CT 06115
Contact: Arnold P. Boecklin, VP, (203) 728-4420

Number of separate master trust clients: 25
Number of directed trust clients: 19
Master trust assets: $1.7 million
Directed trust assets: $550 million
Custodial employee benefit assets: $550 million
Total employee benefit assets: $4.6 billion
Number of separate portfolios: 168
Average number of accounts per account supervisor: 12
Average number of portfolios per investment manager contact: 10
Accounting system utilized: Trade date (full accrual) late 1988; early 1989
Fail float credit provided: No—available with new system
Short-term instruments used: U.S. government Agency, CDs, VANS, REPOS, Commercial Paper MGICs
Date short-term interest credited: Same day
Timeliness of reporting package: Four business days after month end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, index fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

CRESTAR BANK

919 E. Main St.
P.O. Box 26665
Richmond, VA 23261-6665
Contact: Henry T. Tucker Jr., Sr. VP, (804) 782-7405

Number of separate master trust clients: 8
Number of directed trust clients: 230
Master trust assets: $282.500 million
Directed trust assets: $631.770 million
Custodial employee benefit assets: $1.379 billion
Total employee benefit assets: $1.7 billion

Number of separate portfolios: 230
Average number of accounts per account supervisor: 70
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: No
Short-term instruments used: Short term investment fund and various money market funds
Date short-term interest credited: Monthly, second business day
Timeliness of reporting package: Generally 7-10 business days
Services provided: Performance measurement, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

DOMINION TRUST CO.

213 S. Jefferson St.
P.O. Box 13327
Roanoke, VA 24040
Contact: Stephen A. Slovensky, VP, (703) 563-7857

Number of separate master trust clients: 1
Number of directed trust clients: 80
Master trust assets: $46 million
Directed trust assets: $210 million
Custodial employee benefit assets: $107 million
Total employee benefit assets: $363 million
Number of separate portfolios: 256
Average number of accounts per account supervisor: 25
Average number of portfolios per investment manager contact: 60
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: No
Short-term instruments used: Institutional liquid assets, treasury obligations portfolio, trustfunds liquid asset trust, treasury portfolio
Date short-term interest credited: First of month following
Timeliness of reporting package: By fifth business day following end of accounting period to investment managers; by 15th business day to client
Services provided: Portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: Corporate issues — settlement date — clearinghouse funds; government issues — settlement date — federal funds
Fee structure: Based on combination of asset value and individual services

FIRST INTERSTATE BANK, LTD. INSTITUTIONAL TRUST

707 Wilshire Blvd.
Los Angeles, CA 90017
Contact: Terry Colberg, VP (213) 612-6656

Number of separate master trust clients: 32
Number of directed trust clients: 350
Master trust assets: $9 billion
Directed trust assets: $14.4 billion
Custodial employee benefit assets: Not Reported
Total employee benefit assets: $23.4 billion
Number of separate portfolios: 832
Average number of accounts per account supervisor: 3
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual) 3, Contractual settlement date with pending adjustment 821
Fail float credit provided: Yes
Short-term instruments used: 90 day treasury
Date short-term interest credited: Three business days
Timeliness of reporting package: 10 days after accounting period
Services provided: Participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST INTERSTATE BANK OF OREGON, N.A.

P.O. Box 2971
Portland, OR 97208
Contact: Peter M. Cullen, VP, (503) 225-2484

Number of separate master trust clients: 21
Number of directed trust clients: 51
Master trust assets: $5.251 billion
Directed trust assets: $479.632 million
Custodial employee benefit assets: $136.283 million
Total employee benefit assets: $5.981 billion
Number of separate portfolios: 139
Average number of accounts per account supervisor: 58
Average number of portfolios per investment manager contact: 2
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date
Fail float credit provided: No
Short-term instruments used: Money market funds
Date short-term interest credited: Within three business days after end of the month
Timeliness of reporting package: Within five business days
Services provided: Performance measurement, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, on-line access, cash management, global custody, multi-currency accounting, options & futures processing, customized reporting
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST INTERSTATE BANK OF UTAH, N.A.

180 S. Main St.
P.O. Box 30169
Salt Lake City, UT 84142-1604
Contact: Rod R. Cushing, VP, (801) 350-7118

Number of separate master trust clients: 28
Number of directed trust clients: 46
Master trust assets: $163.500 million
Directed trust assets: $7.140 million
Custodial employee benefit assets: $294.920 million
Total employee benefit assets: $479.650 million
Number of separate portfolios: 68
Average number of accounts per account supervisor: 24
Average number of portfolios per investment manager contact: 23
Accounting system utilized: Contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Various short term investment funds, commercial paper and treasury bills
Date short-term interest credited: First business day monthly
Timeliness of reporting package: 5-10 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, index fund, plan design, IRS plan qualification, full income & expense accrual accounting, automated daily sweep of cash to STIF funds & on line computer access.
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST INTERSTATE BANK OF WASHINGTON

P.O. Box 21927
Seattle, WA 98111
Contact: Lawrence T. Divers, VP & Trust Officer, (206) 343-8346

Number of separate master trust clients: 1
Number of directed trust clients: 15
Master trust assets: $200 million
Directed trust assets: $300 million
Custodial employee benefit assets: $1.646 billion
Total employee benefit assets: $1.646 billion
Number of separate portfolios: 218
Average number of accounts per account supervisor: 82
Average number of portfolios per investment manager contact: 25
Accounting system utilized: Actual delivery date
Fail float credit provided: Yes
Short-term instruments used: In-house investment fund, Federated master trust
Date short-term interest credited: Monthly
Timeliness of reporting package: Monthly
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, benefit disbursement
Policy for crediting dividends and interest: On due date
Fee structure: Based on combination of asset value and individual services

FIRST PENNSYLVANIA BANK, N.A.

15th & Market Streets
Philadelphia, PA 19101
Contact: James F. McHale, Sr. VP, (215) 786-7946

Number of separate master trust clients: 20
Number of directed trust clients: 50
Master trust assets: $3.9 billion
Directed trust assets: $3.7 billion
Custodial employee benefit assets: $25.3 billion
Total employee benefit assets: $29.4 billion
Number of separate portfolios: 230
Average number of accounts per account supervisor: 17
Average number of portfolios per investment manager contact: 55
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: STIF, master repo account institutional money market fund
Date short-term interest credited: Monthly
Timeliness of reporting package: Performance measurement, 13-17 business days; TUCS performance comparison, 3-4 weeks after calendar quarter end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, per-

formance comparison, global custody, on-line performance measurement, on-line via dial-up capability
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST SECURITY BANK OF UTAH, N.A.

79 S. Main
P.O. Box 30007
Salt Lake City, UT 84130
Contact: Gregory D. Burnett, V.P./Mgr., (801) 350-5356

Number of separate master trust clients: 2
Number of directed trust clients: 10
Master trust assets: $175.4 million
Directed trust assets: $5.4 million
Custodial employee benefit assets: $39 million
Total employee benefit assets: $446.1 million
Number of separate portfolios: 24
Average number of accounts per account supervisor: 4
Average number of portfolios per investment manager contact: 2
Accounting system utilized: Contractual settlement date
Fail float credit provided: Not Reported
Short-term instruments used: Money market funds
Date short-term interest credited: End of month
Timeliness of reporting package: Five business days from end of reporting period
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST TENNESSEE BANK

165 Madison Ave.
Memphis, TN 38103
Contact: Deborah McDonald, Sr. VP & Mgr., Employee Benefits Dept., (901) 523-4626

Number of separate master trust clients: 12
Number of directed trust clients: 98
Master trust assets: $821 million
Directed trust assets: $662 million
Custodial employee benefit asset value: $642 million
Total employee benefit asset value: $1.528 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: 25
Average number of portfolios per investment manager contact: 23
Accounting system utilized: Actual delivery date
Fail float credit provided: Settle trades on actual settlement date, any delay in settlement caused by FTB, customer is compensated.
Short-term instruments used: Commercial paper, T-bills, money market fund
Date short-term interest credited: Payable date
Timeliness of reporting package: 10-20 working days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: Payable date + 1 for Clearing House Fund, Payable date for Federal Fund Securities
Fee structure: Based on asset value only

FIRST TRUST

First Trust Center
180 E. Fifth St.
St. Paul, MN 55101
Contact: David Bodine, VP, (612) 223-7679

Number of separate master trust clients: 25
Number of directed trust clients: Not Reported
Master trust assets: $3 billion
Directed trust assets: Not Reported
Custodial employee benefit assets: $6 billion
Total employee benefit assets: $9 billion
Number of separate portfolios: 2,000
Average number of accounts per account supervisor: 12
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: Yes, assets remain invested until securities are delivered
Short-term instruments used: First trust's short-term investment fund
Date short-term interest credited: Not Reported
Timeliness of reporting package: 10 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, custody and global securities settlement through direct sub-custodian network
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST WACHOVIA CORP.

P.O. Box 3099
Winston-Salem, NC 27150
Contact: Jane B. Fisher, Sr. VP, (919) 770-6348

Number of separate master trust clients: 63
Number of directed trust clients: 60
Master trust assets: $23.5 billion
Directed trust assets: $550 million
Custodial employee benefit assets: $3.882 billion
Total employee benefit assets: $33.2 billion
Number of separate portfolios: 600
Average number of accounts per account supervisor: 8
Average number of portfolios per investment manager contact: 22
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: Yes
Short-term instruments used: STIF Funds, demand notes, short-term bond fund, GIC Fund, CD Fund, Treasury notes, repos, and individually managed accounts
Date short-term interest credited: First of month
Timeliness of reporting package: 10 business days or less
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, global custody, asset allocation, options and futures processing, comparative performance, customized reporting, trade execution reporting, and GIC fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

FIRST WISCONSIN TRUST CO.

P.O. Box 2054
Milwaukee, WI 53201
Contact: Robert Fuller, VP, (414) 765-4444

Number of separate master trust clients: 22
Number of directed trust clients: 1,012
Master trust assets: $2.916 million
Directed trust assets: $2.5 million
Custodial employee benefit assets: $2.767 million
Total employee benefit assets: $8.182 million
Number of separate portfolios: 900
Average number of accounts per account supervisor: 15
Average number of portfolios per investment manager contact: 50
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: Yes
Short-term instruments used: Short-term income fund and variable demand notes, money market mutual funds
Date short-term interest credited: Second business day
Timeliness of reporting package: Financial transactions are on the second business day, all others seven to eight business days
Services provided: Performance measurement, portfolio analysis, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, quantitative fixed income management
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

HARRIS TRUST AND SAVINGS BANK

111 W. Monroe St.
Chicago, IL 60603
Contact: Walter J. Kowalczyk, VP, (312) 461-2121

Number of separate master trust clients: 76
Number of directed trust clients: 231
Master trust assets: $46.7 million
Directed trust assets: $14.6 billion
Custodial employee benefit assets: $12 million
Total employee benefit assets: $73.3 billion
Number of separate portfolios: 750
Average number of accounts per account supervisor: 6
Average number of portfolios per investment manager contact: 95
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: Yes
Short-term instruments used: STIF, commercial paper, certificates of deposit (domestic and Euro), bankers acceptances, U.S. government and agency issues, repurchase agreements, and demand notes
Date short-term interest credited: Third to fourth business day of month following investment
Timeliness of reporting package: Monthly transactions and assets statements, 2-7 business days; monthly/quarterly, audited financial summaries with plan accounting, 10-15 business days; annual audited financial summaries with ERISA & plan accounting, 15-20 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, universe comparison, options/futures accounting, global custody, on-line accounting and analytics with download capability, "Flexi-REPORTING," automated daily sweep of cash,

automated cash management, custom cash management
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

HERITAGE PULLMAN BANK & TRUST CO.

1000 E. 111th St.
Chicago, IL 60187
Contact: Robert J. Ferrari, VP & TO, (312) 785-1000

Number of separate master trust clients: 0
Number of directed trust clients: 200
Master trust assets: 0
Directed trust assets: $100 million
Custodial employee benefit assets: $10 million
Total employee benefit assets: $120 million
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Not Reported
Short-term instruments used: Not Reported
Date short-term interest credited: Not Reported
Timeliness of reporting package: Not Reported
Services provided: Not Reported
Policy for crediting dividends and interest: Not Reported
Fee structure: Not Reported

THE INTERNATIONAL TRUST CO.

P.O. Box 75
Royal Bank Tower North
Toronto, Ontario, Canada M5J 2J2
Contact: William A. Pascoe, VP (416) 865-0515

Number of separate master trust clients: 20
Number of directed trust clients: 52
Master trust assets: $2.0 billion
Directed trust assets: $1.2 billion
Custodial employee benefit assets: Not Reported
Total employee benefit assets: $3.5 billion
Number of separate portfolios: 360
Average number of accounts per account supervisor: 18
Average number of portfolios per investment manager contact: 30
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: No
Short-term instruments used: STIF, money market funds
Date short-term interest credited: Weekly
Timeliness of reporting package: 1-10 business days depending on package
Services provided: Performance measurement, participant recordkeeping, securities lending, benefit disbursement, index fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on individual services performed

LASALLE NATIONAL BANK

135 S. LaSalle St.
Chicago, IL 60690
Contact: James F. Sullivan, Sr. VP, (312) 443-2497

Number of separate master trust clients: 14
Number of directed trust clients: 100
Master trust assets: $768 million
Directed trust assets: $868 million
Custodial employee benefit assets: $1.0 billion
Total employee benefit assets: $2.5 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Contractual settlement date
Fail float credit provided: Not Reported
Short-term investment used: STIF, Master Notes, Instruments MMF
Date short-term interest credited: Second of following month
Timeliness of reporting package: 7-10 days (sooner upon request)
Services provided: Performance measurement, participant recordkeeping, benefit disbursement, index fund, venture capital, double management or cash (i.e. private STIF)
Policy for crediting dividends and interest: On payable date
Fee structure: Based on asset value only.

MANUFACTURERS HANOVER TRUST CO.

450 W. 33rd St., 15th Floor
New York, NY 10001
Contact: Renee San Marco, VP, (212) 613-7900

Number of separate master trust clients: 97
Number of directed trust clients: 164
Master trust assets: $26 billion
Directed trust assets: $348 million
Custodial employee benefit assets: $38 billion
Total employee benefit assets: $64.3 billion
Number of separate portfolios: 1,316
Average number of accounts per account supervisor: 8
Average number of portfolios per investment manager contact: 65
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date, actual delivery date
Fail float credit provided: Yes
Short-term instruments used: MHT's STIF
Date short-term interest credited: Accrued daily; credited by fifth business day.
Timeliness of reporting package: Monthly transaction report, 3-5 business days; financial reports, 5-7 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, plan accounting, vertically integrated on-line access (VIOLA)
Policy for crediting dividends and interest: On payable date for listed securities, credited with same day funds
Fee structure: Based on combination of asset value and individual services

MANUFACTURERS NATIONAL BANK OF DETROIT

100 Renaissance Center, 13th Floor
Detroit, MI 48243
Contact: James Sullivan, VP/Sr. TO, (313) 222-4470

Number of separate master trust clients: 36
Number of directed trust clients: 4,222
Master trust assets: $23.5 billion
Directed trust assets: $9.9 billion
Custodial employee benefit assets: $8.6 billion
Total employee benefit assets: $18.5 billion
Number of separate portfolios: 160
Average number of accounts per account supervisor: 100-150
Average number of portfolios per investment manager contact: 14
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Commercial paper, certificates of deposit, repurchase agreements
Date short-term interest credited: Three business days after end of period
Timeliness of reporting package: Five business days after end of month
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, cash management
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

THE MARINE MIDLAND BANK, N.A.

250 Park Ave., Second Floor
New York, NY 10177
Contact: Moira L. Patterson, VP, (212) 503-2724

Number of separate master trust clients: 20
Number of directed trust clients: 110
Master trust assets: $1.8 billion
Directed trust assets: $600 million
Custodial employee benefit assets: $800 million
Total employee benefit assets: $3.2 billion
Number of separate portfolios: 480
Average number of accounts per account supervisor: 15
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Short term investment fund, money market fund, treasury bills, master notes, commercial paper
Date short-term interest credited: Monthly—end of month
Timeliness of reporting package: 7-10 business days
Services provided: Performance measurement, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, on-line access to account information
Policy for crediting dividends and interest: On payable date
Fee structure: Based on individual services performed

MARQUETTE BANK MINNEAPOLIS N.A.

6th & Marquette Streets
Minneapolis, MN 55480
Contact: Andrews Freeman, Trust Sales Officer, (612) 341-5724

Number of separate master trust clients: 0
Number of directed trust clients: 303
Master trust assets: 0
Directed trust assets: $221 million
Custodial employee benefit asset value: $650 million
Total employee benefit asset value: $871 million
Number of separate portfolios maintained: 300
Average number of accounts per account supervisor: 70
Average number of portfolios per investment manager contact: 50
Accounting system utilized: Contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Shearson Temp Fund, Fidelity Government fund, Federated master trust, Federated ST US Government, Federated treasury oblig. Shearson Muni

Date short-term interest credited: First day of following month
Timeliness of reporting package: Within 10 business days following month end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, investment advisory service, consulting service to assist client in finding qualified investment advisor
Policy for crediting dividends and interest: On due date
Fee structure: Based on combination of asset value and individual services

MARSHALL & ILSLEY TRUST CO.
770 N. Water St.
Milwaukee, WI 53202
Contact: Morry L. Birnbaum, VP, (414) 287-7187

Number of separate master trust clients: 46
Number of directed trust clients: 600
Master trust assets: $1.4 billion
Directed trust assets: $920 million
Custodial employee benefit assets: $870 million
Total employee benefit assets: $3.17 billion
Number of separate portfolios: 600
Average number of accounts per account supervisor: 100
Average number of portfolios per investment manager contact: 15
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: Negotiated
Short-term instruments used: STIF with ACM; T-bills
Date short-term interest credited: Daily
Timeliness of reporting package: Monthly & quarterly, 5-7 business days; Annual, 15 business days
Services provided: Performance measurement, portfolio analysis, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, on-line access, investment management data downloading
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

MELLON BANK
One Mellon Bank Center
Pittsburgh, PA 15258
Contact: Gary A. Rothman, VP, (412) 234-5000

Number of separate master trust clients: 124
Number of directed trust clients: 58
Master trust assets: $110 billion
Directed trust assets: $2.6 billion
Custodial employee benefit assets: $7.2 billion
Total employee benefit assets: $102 billion
Number of separate portfolios: 1,263
Average number of accounts per account supervisor: 5-8 (depending on specifics)
Average number of portfolios per investment manager contact: 25
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: Yes
Short-term instruments used: Commingled, short-term funds utilizing A-1 and P-1 investments. Proprietary funds are also available.
Date short-term interest credited: Earned daily/credited weekly
Timeliness of reporting package: Monthly, quarterly and annually with monthly statements available third business day following month end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, international custody, on-line access, options & futures, customized reports, performance consulting
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

MONTREAL TRUST COMPANY OF CANADA
15 King Street West
Toronto, Ontario, Canada, M5H 1B4
Contact: Ray La Force, VP-Pension Administration, (416) 860-5555

All figures are in Canadian dollars

Number of separate master trust clients: 87
Number of directed trust clients: 1,087
Master trust assets: $7.9 billion
Directed trust assets: $19.2 billion
Custodial employee benefit assets: $19.9 billion
Total employee benefit assets: $19.9 billion
Number of accounts: 2,662
Average number of accounts per account supervisor: 150
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Contractual settlement date
Fail float credit provided: No
Short-term instruments used: T-Plus (Short term investment fund)
Date short-term interest credited: Monthly (accrued daily)
Timeliness of reporting package: 5-10 working days following month end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, benefit disbursement, global custody, specialized index funds
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

NCNB TEXAS
350 N. St. Paul, 4-ODC
Dallas, TX 75201
Contact: David J. Pittman, Sr. VP, Trust Institutional Marketing, (214) 922-6506

Number of separate master trust clients: 250
Number of directed trust clients: Included in MT
Master trust assets: $36.1 billion
Directed trust assets: Included in MT
Custodial employee benefit assets: $12.1 billion
Total employee benefit assets: $35.0 billion
Number of separate portfolios: 207
Average number of accounts per account supervisor: 10
Average number of portfolios per investment manager contact: 9
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Multiple STIF Funds, Individually Managed STIF, Aggressive STIF, Silver Star Prime and Silver Star Goverment
Date short-term interest credited: First business day of month
Timeliness of reporting package: On-Line, second business day; Hard Copy, fifth business day
Services provided: Performance measurement, portfolio analysis, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, client on-line reporting, downloading and formatting capabilities, 150+ accounting reports, global custody with multi-currency accounting, securities lending, TUCS, plan accounting, fail float earnings, pre-crediting dividends and interest on payable date in good funds, daily pricing, benefit payments, withholding and control disbursement, on-line performance measurement & analytics, on-line DTC/ID securities processing, on-line benefit payments, on-line cash management and forecasting, government reporting, portfolio risk insurance, GIC wholesale service, dedicated bond portfolio, performance consulting, transition manager service, futures and options, international, real estate and energy investment.
Policy for crediting dividends and interest: On payable date, in good funds
Fee Structure: Based on combination of asset value and individual services

NATIONAL BANK OF DETROIT
611 Woodward Ave.
Detroit, MI 48226
Contact: Larry D. Rankens, Asst. VP, (313) 225-2660

Number of separate master trust clients: 142
Number of directed trust clients: Not Reported
Master trust assets: $23.3 million
Directed trust assets: Not Reported
Custodial employee benefit assets: $5.4 million
Total employee benefit assets: $28.7 million
Number of separate portfolios: 473
Average number of accounts per account supervisor: 10
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: Yes
Short-term instruments used: Master trust STIF-A fund with a diversified portfolio of high quality, short-term instruments, including trust demand notes and commercial paper, domestic and Eurodollar CDs, bankers acceptances, repurchase agreements secured by treasury issues and treasury bills
Date short-term interest credited: First business day after end of the month
Timeliness of reporting package: Monthly reports, 5-7 business days; asset and liability reports, within 30 business days; performance measurement, within 5-30 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, cash management, global custody, on-line (data monitor)
Policy for crediting dividends and interest: On payable date in federal funds
Fee structure: Based on combination of asset value and individual services

NATIONAL TRUST CO.
21 King Street, East
Toronto, Ontario, Canada M5C 1B3
Contact: Paul Lewis, Vice President Employee Benefit services, (416) 361-3611

All figures are in Canadian dollars

Number of separate master trust clients: 42

Number of directed trust clients: 182
Master trust assets: $4.2 billion
Directed trust assets: $8 billion
Custodial employee benefit assets: $12.2 billion
Total employee benefit assets: $12.2 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: 10
Average number of portfolios per investment manager contact: No
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: Not Reported — 95% of trades processed through Canadian Depository for Securities (book-based system)
Short-term instruments used: Short Term Investment Fund, daily bank interest on uninvested cash
Date short-term interest credited: Daily
Timeliness of reporting package: 10 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, benefit disbursement, index fund, short term investment fund
Policy for crediting dividends and interest: On due date
Fee structure: Based on combination of asset value and individual services

NORSTAR TRUST CO.

45 East Ave.
Rochester, NY 14604
Contact: John C. Law, VP, (716) 546-9092

Number of separate master trust clients: Not Reported
Number of directed trust clients: 125
Master trust assets: Not Reported
Directed trust assets: $100 million
Custodial employee benefit assets: $329.823 million
Total employee benefit assets: $1.220 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Contractual settlement date
Fail float credit provided: No
Short-term instruments used: Money Market Funds, Commercial Paper Repurchase Agreements, etc.
Date short-term interest credited: Within 2-3 business days after the end of the month
Timeliness of reporting package: Monthly
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on individual services performed

THE NORTHERN TRUST CO.

50 S. LaSalle St.
Chicago, IL 60675
Contact: Thomas W. Kimen Jr., Sr. VP, (312) 630-6000

Number of separate master trust/custody clients: 246
Number of directed trust clients: 15
Master trust/custody assets: $128.4 billion
Directed trust assets: $2.7 billion
Custodial employee benefit assets: $7.9 billion
Total employee benefit assets: $139 billion
Number of separate portfolios: 4,200
Average number of accounts per account supervisor: 5
Average number of portfolios per investment manager contact: 120
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: Yes
Short-term instruments used: Short term investment fund, Benchmark, and NORCASH
Date short-term interest credited: Third business day after month end
Timeliness of reporting package: 3-5 days after period end; available on-line 24 hours a day
Services provided: Performance measurement, portfolio analysis, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, global custody; portfolio restructuring; EAFE index fund; electronic delivery service; cash management; asset management
Policy for crediting dividends and interest: On payable date. Regularly scheduled dividend and interest payments are credited on payable date in "good funds" regardless of whether The Northern Trust has received the funds
Fee structure: Based on combination of asset value and individual services

NORWEST BANK MINNESOTA, N.A.

6th Street & Marquette Avenue
Minneapolis, MN 55479
Contact: Kerry Noyes, VP, (612) 667-4785

Number of separate master clients: 20
Number of directed trust clients: 180
Master trust assets: $3.5 billion
Directed trust assets: $1.7 million
Custodial employee benefit asset value: $3.715 billion
Total employee benefit asset value: $3.715 billion
Number of separate portfolios: 250
Average number of accounts per account supervisor: 5-7
Average number of portfolios per investment manager contact: 40
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: No
Short-term instruments used: Norwest Short Term Investment Fund (STIF)
Date short-term interest credited: Not Reported
Timeliness of reporting package: Eight days following month/quarter end
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund, trustee/custody, global custody, GIC fund, individual investment management
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

RICHFIELD BANK & TRUST CO.

6625 Lyndale Ave., South
Richfield, MN 55423
Contact: John L. Simpson, VP, (612) 861-8307

Number of separate master trust clients: Not Reported
Number of directed trust clients: 250
Master trust assets: Not Reported
Directed trust assets: $200 million
Custodial employee benefit assets: $100 million
Total employee benefit assets: $200 million
Number of separate portfolios: 400
Average number of accounts per account supervisor: 70-80
Average number of portfolios per investment manager contact: 4-400
Accounting system utilized: Actual delivery date
Fail float credit provided: No
Short-term instruments used: Money market funds, T-bills
Date short-term interest credited: Not Reported
Timeliness of reporting package: Not Reported
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: Date of receipt + 1
Fee structure: Based on combination of asset value and individual services

ROYAL TRUST

P.O. Box 7500, Station A
Toronto, Ontario, Canada M5W 1P9
Contact: Mary Taylor, VP, C.F.S. Sales, (416) 864-6982

All figures are in Canadian dollars

Number of separate master trust clients: 89
Number of directed trust clients: 343
Master trust assets: $15.5 billion
Directed trust assets: $11.5 billion
Custodial employee benefit assets: $2.6 billion
Total employee benefit assets: $2.5 billion
Number of separate portfolios: 2,000
Average number of accounts per account supervisor: 45
Average number of portfolios per investment manager contact: 4.5
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: No
Short-term instruments used: Interest on daily cash balances
Date short-term interest credited: Not Reported
Timeliness of reporting package: 10-15 days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, benefit disbursement, Prediktor 4 — desktop pension decision support system
Policy for crediting dividends and interest: On pay date
Fee structure: Based on combination of asset value and individual services

SAN DIEGO TRUST & SAVING BANK

530 Broadway, Dept. A362
San Diego, CA 92101-5209
Contact: David R. Holst, VP, (619) 557-3360

Number of separate master trust clients: 525
Number of directed trust clients: 1,344
Master trust assets: $281.882 million
Directed trust assets: $513.390 million
Custodial employee benefit assets: $3.541 million
Total employee benefit assets: $639.526 million
Number of separate portfolios: 2,112
Average number of accounts per account supervisor: 125 to 150
Average number of portfolios per investment manager contact: 50
Accounting system utilized: Contractual settlement date
Fail float credit provided: No
Short-term instruments used: Money market funds
Date short-term interest credited: Between first and fifth business of month

Timeliness of reporting package: Quarterly statements, 70 days after period end
Services provided: Portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services.

SEAFIRST BANK

P.O. Box 3586
Seattle, WA 98125
Contact: Steven A. Horman, VP, (206) 358-3297

Number of separate master trust clients: 5
Number of directed trust clients: 150
Master trust assets: $100 million
Directed trust assets: $300 million
Custodial employee benefit assets: $420 million
Total employee benefit assets: $1.3 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date, actual delivery date
Fail float credit provided: No
Short-term instruments used: Internally managed STIF
Date short-term interest credited: Third business day
Timeliness of reporting package: 10th working day
Services provided: Performance measurement, participant recordkeeping, ERISA disclosure assistance, benefit disbursement, index fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

SECURITY TRUST CO.

2 N. Charles St., M.S. 100-309
Baltimore, MD 21201
Contact: Kathy Jackson, VP & TO, (301) 244-1443

Number of separate master trust clients: 25
Number of directed trust clients: 42
Master trust assets: $1.172 billion
Directed trust assets: $1.032 billion
Custodial employee benefit assets: $2.09 billion
Total employee benefit assets: $4.294 billion
Number of separate portfolios: 341
Average number of accounts per account supervisor: 55
Average number of portfolios per investment manager contact: 30
Accounting system utilized: Trade date (full accrual) by client request, contractual settlement date with pending adjustment, contractual settlement date
Fail float credit provided: As agreed upon
Short-term instruments used: Internally managed short term investment fund & outside mutual funds upon client request
Date short-term interest credited: Three business days following month end
Timeliness of reporting package: 10 business days from end of reporting period, as an average timeframe
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, securities lending can be arranged through our N.Y. correspondent, GIC fund, on-line performance measurement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

SIGNET TRUST CO.

7 N. Eight St.
Richmond, VA 23260
Contact: James R. Eads, VP, (804) 771-7131

Number of separate master trust clients: 1
Number of directed trust clients: 274
Master trust assets: $191 million
Directed trust assets: $552 million
Custodial employee benefit assets: $750 million
Total employee benefit assets: $1.2 billion
Number of separate portfolios: 275
Average number of accounts per account supervisor: 63
Average number of portfolios per investment manager contact: 8
Accounting system utilized: Trade date (full accrual), contractual settlement date
Fail float credit provided: No
Short-term instruments used: First business day of each month
Date short-term interest credited: First business day of each month
Timeliness of reporting package: Five business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

STATE STREET BANK

P.O. Box 1992
Boston, MA 02101
Contact: John G. Houlihan, Sr. VP, (617) 847-7495

Number of separate master trust clients: 151
Number of directed trust clients: 217
Master trust assets: $63.9 billion
Directed trust assets: $40.4 billion
Custodial employee benefit assets: $13.0 billion
Total employee benefit assets: $191.8 billion
Number of separate portfolios: 1,837
Average number of accounts per account supervisor: 8
Average number of portfolios per investment manager contact: 15
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: The client receives fail float interest income on purchase fails because we do not charge the account until actual settlement date plus one
Short-term instruments used: STIF, G-STI, SPIFF, SPIFF Plus, Maturity Plus STIF, /LA, Merrill Lynch, Seven Seas
Date short-term interest credited: Beginning of following month
Timeliness of reporting package: 5-7 business days
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, market inventory fund
Policy for crediting dividends and interest: On payable date, on due date, Fed interest is credited on payable date. Interest received via wire is credited upon receipt. Interest received by check is payable upon clearance of the check. All DTC items (which are mostly corporate stocks and bonds) are paid in Clearinghouse Funds which are available for investment on payable date plus one, (the day the Clearinghouse funds are good). Any DTC rebated due to payment delays on the part of DTC are credited to the client immediately. All DTC items (which are mostly corporate stocks and bonds) are paid in Clearinghouse Funds which are available for investment on payable date plus one, (the day the Clearinghouse Funds are good). Any DTC rebates due to payment delays on the part of DTC are credited to the client.
Fee structure: Based on combination of asset value and individual services

THE SUMITOMO BANK OF CALIFORNIA

320 California St., Third Floor
San Francisco, CA 94104
Contact: Bob R. Otani, VP & Mgr., (415) 445-8094

Number of separate master trust clients: Not Reported
Number of directed trust clients: 353
Master trust assets: Not Reported
Directed trust assets: $215.959 million
Custodial employee benefit asset value: $30.116 million
Total employee benefit asset value: $303.195 million
Number of separate portfolios: 402
Average number of accounts per account supervisor: 80
Average number of portfolios per investment manager contact: 56
Accounting system utilized: Contractual settlement date
Fail float credit provided: No
Short-term instruments used: Short-term money market funds
Date short-term interest credited: First business day of month
Timeliness of reporting package: 10 business days; 30 calendar days for annuals
Services provided: Performance measurement, portfolio review, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

TEXAS COMMERCE BANK-HOUSTON

P.O. Box 2558
Houston, TX 77252-8037
Contact: Wendy L. Hunt, Trust Officer, (713) 236-5125

Number of separate master trust clients: 8
Number of directed trust clients: 25
Master trust assets: $2 billion
Directed trust assets: $6 billion
Custodial employee benefit assets: $2 billion
Total employee benefit assets: $5 billion
Number of separate portfolios: 68
Average number of accounts per account supervisor: 2-23 Average number of portfolios per investment manager contact: 7 portfolios/Equity portfolio manager, 9 portfolios/Fixed income portfolio manager
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: No
Short-term instruments used: Texas Commerce Bank provides short term investment management to outside managers, as well as directly to clients. The interest on the STIF accounts accrues daily.
Date short-term interest credited: Accrues daily; credited monthly
Timeliness of reporting package: 18-22 days following period end.
Services provided: Performance measurement, portfolio analysis, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement

Policy for crediting dividends and interest: Texas Commerce subscribes to a service which maps scheduled dividend payments in the future. This service interfaces with our internal trust system to assure automatic credit when dividends are issued. Interest is also automatically generated from BTAS, our Basic Trust Accounting System. When a security is purchased, the interest rate, maturity date and interest payment cycle are input; the system then generates all interest information based on the interest payment cycle. Funds are available for reinvestment on trade payable + 1.
Fee structure: Based on combination of asset value and individual services, fees for managed assets totaling over $100m are determined on a negotiated basis.

TRUST COMPANY BANK
P.O. Box 4655
Atlanta, GA 30302
Contact: Roger M. Birkholz, VP, (404) 588-8206

Number of separate master trust clients: 28
Number of directed trust clients: 42
Master trust assets: $2.606 billion
Directed trust assets: $357 million
Custodial employee benefit assets: $1.886 billion
Total employee benefit assets: $4.849 billion
Number of separate portfolios: 80
Average number of accounts per account supervisor: 9.3
Average number of portfolios per investment manager contact: 12
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date
Fail float credit provided: No
Short-term instruments used: Short-term investments company B, managed by AIM Advisors, Inc.
Date short-term interest credited: Third business day after reporting period
Timeliness of reporting package: 10 business days after reporting period
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, securities lending, ERISA disclosure assistance, benefit disbursement, global custody services, customized formatting of statements and reports, on-line access/download
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

UNITED MISSOURI BANK OF KANSAS CITY, N.A.
P.O. Box 419226
Kansas City, MO 64141
Contact: David L. Roberts, Sr. VP, (816) 556-7484

Number of separate master trust clients: 42
Number of directed trust clients: 48
Master trust assets: $1.4 billion
Directed trust assets: $935.9 million
Custodial employee benefit assets: $264.8 million
Total employee benefit assets: $2.5 billion
Number of separate portfolios: 166
Average number of accounts per account supervisor: 512
Average number of portfolios per investment manager contact: 2
Accounting system utilized: Contractual settlement date with pending adjustment
Fail float credit provided: No
Short-term instruments used: UMB Prime Money Market Fund, UMB Federal Money Market fund, Daily Money Market Fund
Date short-term interest credited: First day of month
Timeliness of reporting package: 10th day of month
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

UNITED STATES NATIONAL BANK OF OREGON
321 S.W. Sixth Ave.
Portland, OR 97204
Contact: Marcia A. Bennett, VP & Mgr., (503) 275-6592

Number of separate master trust clients: 6
Number of directed trust clients: 80
Master trust assets: $340 million
Directed trust assets: $100 million
Custodial employee benefit assets: $530 million
Total employee benefit assets: $1.1 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: 25
Average number of portfolios per investment manager contact: 65
Accounting system utilized: Trade date (full accrual) SEI/Trust Aid and EBR systems, Contractual settlement date, EBR; actual delivery date, trust aid
Fail float credit provided: U.S. bank guarantees timely settlements of affirmed/verified trades
Short-term instruments used: Various internally and externally managed funds, plus commercial paper and repurchase agreements
Date short-term interest credited: Third business day
Timeliness of reporting package: Not Reported
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

UNITED STATES TRUST CO.
45 Wall St.
New York, NY 10005
Contact: Joseph DelliCarpini, VP, (212) 806-4360

Number of separate master trust clients: 40
Number of directed trust clients: 68
Master trust assets: $14.6 million
Directed trust assets: $5.7 million
Custodial employee benefit assets: $4.3 million
Total employee benefit assets: $24.6 million
Number of separate portfolios: 465
Average number of accounts per account supervisor: 18
Average number of portfolios per investment manager contact: 46
Accounting system utilized: Trade date (full accrual), actual delivery date (full accrual)
Fail float credit provided: Yes
Short-term instruments used: STIF, demand and master notes
Date short-term interest credited: Second business day
Timeliness of reporting package: Available 5-7 business days
Services provided: Performance measurement, portfolio analysis, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, structured investment products, investment management, asset allocation, portfolio attribution, sponsor decision impact analysis, consulting, plan accounting, on-line client access, flexible report writer, global custody, full accrual settlement date or trade date accounting, tax lot accounting, 990 filing, cash management
Policy for crediting dividends and interest: On payable date
Fee structure: Based on individual services performed

VALLEY NATIONAL BANK OF ARIZONA
P.O. Box 71
Phoenix, AZ 85001
Contact: Russell C. Gunderson, Trust Employee Benefit Sales Manager (602) 261-5188

Number of separate master trust clients: 3
Number of directed trust clients: 174
Master trust assets: $200 million
Directed trust assets: $319 million
Custodial employee benefit assets: $616 million
Total employee benefit assets: $935 million
Number of separate portfolios: 174
Average number of accounts per account supervisor: 35
Average number of portfolios per investment manager contact: 150
Accounting system utilized: Trade date (full accrual)
Fail float credit provided: No
Short-term instruments used: Short-term investment company
Date short-term interest credited: First work-day
Timeliness of reporting package: Accrual basis, fifth workday of month; cash basis, third workday of month
Services provided: Performance measurement, portfolio analysis, portfolio review, participant recordkeeping, ERISA disclosure assistance, benefit disbursement
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services

WELLS FARGO BANK
111 Sutter St., 10th Floor 0188-101
San Francisco, CA 94163
Contact: Tom Torio, VP, Client Services (415) 396-2275

Number of separate master trust clients: 0
Number of directed trust clients: 460
Master trust assets: 0
Directed trust assets: $4.1 billion
Custodial employee benefit assets: $5 billion
Total employee benefit assets: $5 billion
Number of separate portfolios: Not Reported
Average number of accounts per account supervisor: Not Reported
Average number of portfolios per investment manager contact: Not Reported
Accounting system utilized: Trade date (full accrual), contractual settlement date with pending adjustment, contractual settlement date Tr. + 5, actual delivery date same day
Fail float credit provided: No
Short-term instruments used: In-house sweep, 1 money market vehicle, 1 FDIC vehicle.
Date short-term interest credited: Same day
Timeliness of reporting package: 6-10 business days (unaudited reports)
Services provided: Performance measurement, portfolio review, securities lending, ERISA disclosure assistance, benefit disbursement, index fund, open end GIC fund, real estate equity fund, three-way asset allocation fund
Policy for crediting dividends and interest: On payable date
Fee structure: Based on combination of asset value and individual services ☐

PLAN DESIGN
A COLUMN

A False Promise With Medicare?

BY CYNTHIA K. HOSAY
Martin E. Segal Co.
New York

After much deliberation, the proposed expansion of Medicare was signed into law this past July. Generally, this expansion was purported to be the answer to Medicare beneficiaries' catastrophic medical expenses.

However, a close examination of the Medicare Catastrophic Protection Act suggests that it may represent a false promise to beneficiaries. The act has added a new prescription drug benefit and has expanded hospital, nursing home and home care coverage.

But it fails to address the most crucial issue facing the elderly today: long-term care. Medicare was intended to provide coverage for beneficiaries' acute care and the new law extends acute care coverage. Yet, the majority of the elderly's illnesses are chronic, long-term conditions. And the greatest share of their out-of-pocket medical expenses are for chronic care.

On the other hand, employers may benefit from the expanded coverage the law provides. The new coverage is likely to duplicate retiree health coverage that companies currently provide.

As a result, employers have the opportunity to restructure their retiree health plans. But first they must review their existing plans, determine how to comply with the law's "rebate" requirement and examine all available redesign options.

The expanded coverage

The Medicare Catastrophic Protection Act makes changes in the two categories of coverage offered under the program: the Hospital Insurance Program (Part A) and the Supplementary Medical Insurance Program (Part B). The new coverage will be phased in over a three-year period beginning in 1989.

The additional benefits provided under Part A will be financed by an income tax-based surcharge, capped at $800 per person in 1989, gradually increasing to $1,050 per person in 1993. The additional Part B benefits will be financed by a flat $4 per month charge in 1989, climbing to $10.20 per month by 1993.

Under Part A, the new law sets an annual out-of-pocket maximum a beneficiary must pay for hospitalization. There is unlimited coverage for inpatient hospital care and coinsurance charges for inpatient hospital days have been eliminated.

Perhaps the most important new benefit added under the law is the prescription drug benefit, which addresses a crucial need of the elderly and disabled.

For extended care services provided in a nursing home, the coinsurance has been reduced and the number of days covered in a skilled nursing facility has been increased to 150. Also, a restriction on hospice care coverage for the terminally ill has been lifted.

Under Part B, which covers outpatient hospital services and physicians services, the law establishes an annual out-of-pocket limit the beneficiary must pay for Medicare-eligible services. Home health-care coverage has been extended and a "respite care" benefit has been added that provides coverage of in-home care for a "chronically dependent person" for up to 80 hours each year.

The law has changed a Medicaid eligibility provision to aid beneficiaries who must impoverish themselves in order to receive Medicaid benefits. The "spousal impoverishment provision" permits the spouse of a beneficiary entering a nursing home to retain a portion of his/her monthly income and one-half of the couple's assets to avoid impoverishment.

Perhaps the most important new benefit added under the law is the prescription drug benefit, which addresses a crucial need of the elderly and disabled for which they have previously received little financial assistance.

Prescription drugs that can be self-administered at home will be covered for the first time, beginning in 1991. However, beneficiaries still must pay a deductible before coverage begins, and will have to pay part of the cost of each prescription.

While the law expands Medicare benefits and adds a prescription drug benefit, it still does not cover some important, and expensive, health-care services. The law does not provide for vision care and eyeglasses, hearing exams and hearing aids or dental work. Also, it does not address the issue of prevention. For example, coverage is not provided for physical exams.

Although the prescription drug benefit has been added, beneficiaries still have to assume a large share of the cost through the deductible and a coinsurance charge. And, while the law expands the catastrophic care benefits, it does not begin to meet the elderly's increasing need for long-term care.

Long-term care encompasses a wide range of medical services, such as skilled nursing care and therapy given in a nursing home or home care setting, administered for chronic illnesses. The new Medicare law addresses the issue by establishing a commission to study and recommend to Congress ways to finance comprehensive long-term care for the elderly and disabled.

Key provisions

Two provisions of the Medicare Catastrophic Protection Act will directly influence the cost and structure of a company's retiree health plan.

The "maintenance of effort" provision requires employers who provide coverage that duplicates the expanded Medicare benefits to reimburse their Medicare-eligible retirees for the value of the duplicate benefits. The reimbursement can be in the form of a refund, increased benefits or reduced contributions for coverage.

The requirement applies only if the duplicate employer-provided benefits are worth at least half of the value of the new benefits, according to standards to be issued by the Department of Health and Human Services. The value of duplicate Part A benefits must be rebated in 1989 and Part B benefits in 1990.

Additionally, the new $4 per month premium for additional Part B benefits presents some employers with a decision that must be made without delay. Employers who are paying the Medicare Part B premium (currently $24.80 per month, rising to $31.90 in 1989) must decide by year's end if they are going to increase their Part B reimbursement to cover the additional $4 per month charge.

This decision should not be made lightly, since the long-range implications will be significant. By 1993, the supplemental premium will climb to $10.20 per month and the 1989 Part B premium of $31.90, indexed to inflation, could reach $40 or more per month. Therefore, by 1993, an employer could pay more than $50 per month for each retiree's Part B premium.

Review plans

Now is the time for employers to review their retiree health plans to decide upon their approach to the maintenance of effort provision. However, without the benefit of final regulations detailing how to value duplicate benefits, employers cannot accurately determine duplicate coverage.

Once the regulations have been released, employers must decide how to reimburse Medicare-eligible retirees for the duplicate coverage: cash refunds, additional benefits or reduced contribution levels. Then, employers can begin to redesign their programs to avoid duplication and to calculate future budgets for retiree health-care benefits.

Once employers eliminate duplicate coverage, there are numerous redesign possibilities to consider. Employers may want to consider providing benefits not covered under Medicare, such as vision care, dental care and physical examinations.

Also, employers might consider

Once employers eliminate duplicate coverage, there are numerous redesign possibilities to consider. Employers may want to consider providing benefits not covered under Medicare, such as vision care, dental care and physical examinations.

"I wouldn't compromise on powerful features for our defined contribution plans."

"I wouldn't compromise on responsive service from employee benefit specialists."

We got AutoFax℠/MPR– the micro allocation system from SunGard

Powerful Features

- Efficiently handles 401(k), Profit Sharing and Money Purchase Plan allocations including tax reporting.
- Compliance testing for 415, 401(k) Anti-Discrimination and Top-Heavy tests.

Flexibility

- Up to ten investment funds and ten contribution types.
- Various vesting schedules and earnings formulas including time-weighting.
- System proposal features for custom-designed plans.

Customer Service

- Superior support from a staff with experience in employee benefits.
- System training and benefit classes for my beginning employees and experienced administrators as well.

Enhancements

- AutoFax/MPR is up-to-date and current with the most recent law requirements.
- System enhancements are made using my suggestions so I have a voice in the future of AutoFax/MPR.

SUNGARD®
TRUST SYSTEMS INC.

4822 Albemarle Road
Charlotte, NC 28205
Telephone: 704/568-5180

PRESENT AND FUTURE MEDICARE COVERAGE AND PREMIUM COSTS

PART A—INPATIENT CHARGES	1988	1989	1990	1991	1992	1993
Hospital						
• Deductible	$540/benefit period	$564 (est.)/yr.	Indexed	Indexed	Indexed	Indexed
• Daily Copayment	$0 for 60 days $135 for 61-90 days	No copayment	No copayment	No copayment	No copayment	No copayment
—Lifetime reserve	$270 for 60 days					
• Limits on Length of Stay	150 days/benefit period (incl. lifetime reserve)	No limit	No limit	No limit	No limit	No limit
Skilled Nursing Facility (SNF)						
• Daily Copayment	$0 for 20 days $67.50 for 21-100 days	$20.50 (est.) for first 8 days next 142 days - 0	Indexed	Indexed	Indexed	Indexed
• Limits on Length of Stay	100 days/ benefit period	150 days/yr.	150 days/yr.	days/yr.	150 days/yr.	150 days/yr.
• Must be hospitalized before entering SNF	Yes	No	No	No	No	No
Hospice-Limits on Length of Stay	210 days—lifetime maximum	No limits	No limits	No limits	No limits	No limits
Custodial Nursing Home Care	No	No	No	No	No	No
Catastrophic and Prescription Drug Premium (tax surcharge)						
Amt./$150 income tax	NA	$22.50	$37.50	$39.00	$40.50	$42.00
which equals % of income tax	NA	15%	25%	26%	27%	28%
Max. indiv./family per year	NA	$800/$1600	$850/$1700	$900/$1800	$950/$1900	$1050/$2100
PART B—MEDICAL SERVICES						
• Existing Premium	$24.80	Indexed	Indexed	Indexed	Indexed	Indexed
• Additional Premium	NA	$4.00	$4.90	$7.36	$9.20	$10.20
• Deductible	$75	$75	$75	$75	$75	$75
• Coinsurance	20%	20%	20%	20%	20%	20%
Out-of-Pocket Maximum	No limit	No limit	$1370[1]	Indexed	Indexed	Indexed
Respite Care (for caregivers) —only available after drug deductible or out-of-pocket maximum met	NA	NA	80 hrs. assistance	80 hrs. assistance	80 hrs. assistance	80 hrs. assistance
Prescription Drugs (outpatient)	None[2]	None[2]	None[2]	All	All	All
• Deductible	NA	NA	NA[2]	$600	$652	Indexed
• Coinsurance	NA[2]	NA[2]	NA[2]	50%	40%	20%

NA — Not Applicable

[1] $1370 out-of-pocket includes $75 Part B deductible, 3 pint blood deductible and 20% coinsurance.

[2] In 1988 and 1989 there is no drug coverage except for immunosuppressive (IS) drugs during the first year of an organ transplant. There is no deductible and coinsurance is 20%. Beginning in 1990, IS drug coverage is expanded to include drugs after the first year of transplant and coverage begins for home intravenous (IV) drugs. In 1990, there is a $550 deductible and coinsurance is as follows: IV and first year IS drugs—20%, later years IS drugs—50%. Coinsurance for IV and first year IS drugs remain at 20%. Coinsurance for IS drugs in years after the transplant reduces in accordance with the chart.

OTHER MINOR CHANGES

Home Health Services—Coverage is unlimited but must be on an intermittent basis. Currently treatment of 5 or more days per week is not considered intermittent if it lasts more than 2 or 3 weeks. Effective 1/1/90, coverage may be provided 7 days per week for up to 38 consecutive days and still be considered intermittent.

Mammography Screening—Effective 1/1/90, limited coverage of mammography screening will be covered for elderly and disabled Medicare beneficiaries.

Christian Science Sanatorium Nursing Services—Effective 1/1/89, coverage is increased from 30 days per benefit period to 45 days per year subject to the daily skilled nursing facility coinsurance.

Blood Deductible—Effective 1/1/89, any blood deductible satisfied under Part B will reduce the blood requirements under Part A.

Emergency Hospital Services—Effective 1/1/89, coverage for emergency hospital services in non-participating hospitals is increased from 60% to 80% for routine services and 80% to 100% for ancillary services.

paying the prescription drug deductible. If they do not already do so, some employers may elect to pay retirees' Part B premiums. And employers may choose to address another catastrophic need of the elderly—long-term care.

Plan for the future

The Medicare Catastrophic Protection Act has altered the future scope and structure of retiree health benefits. Because of the new and expanded benefits Medicare will provide, the health-care needs of employers' Medicare-eligible retirees have changed. As a result, there is an opportunity to re-examine and redesign health benefit packages to meet both commpany benefit goals and retirees' needs.

A comprehensive review of plan design is necessary for three reasons. First, employers must identify where current coverage duplicates the expanded Medicare coverage. Second, employers who reimburse retirees for Part B premiums must decide by January 1989 whether or not to pay the additional $4 month Part B premium. And third, employers must develop and implement a clear communications program to inform retirees of the changes and ensure a smooth transition from one benefit package to another.

In time, Medicare beneficiaries may realize that the expansion of Medicare does not provide the comprehensive coverage they originally envisioned. However, employers can take advantage of the opportunity to redesign retiree health plans to meet the changing needs of their Medicare-eligible retirees. ☐

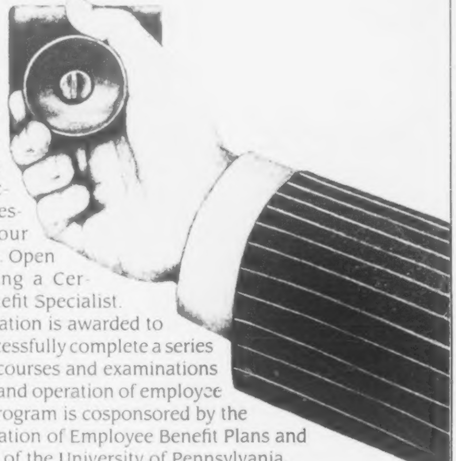
The Medicare Catastrophic Protection Act has altered the future scope of retiree health benefits. Because of the new and expanded benefits Medicare will provide, the health-care needs of employers' Medicare-eligible retirees have changed.

Dr. Cynthia K. Hosay is vice president and director of health services for the Martin E. Segal Co. in New York. Dr. Hosay holds a B.A., M.A. and Doctor of Arts degree in French literature from the University of Michigan and a M.A. and Ph.D. in community health from New York University.

Next Month In PENSION WORLD

The January issue of PENSION WORLD, which will contain an industry outlook on the stock and bond market in 1989, will feature articles on several key investment and employee-benefit topics, including:

- How automation can help real estate managers increase their operating efficiency.
- A profile on a real estate investment manager.
- A report on how absenteeism can affect a company's bottom line.



CEBS
Opens Doors

Expertise is the key to job performance. It instills a sense of confidence and can lead to a promotion or professional recognition. A CEBS designation can be your key to that expertise. Open doors—by becoming a Certified Employee Benefit Specialist.

The CEBS designation is awarded to individuals who successfully complete a series of ten college level courses and examinations covering the design and operation of employee benefit plans. The program is cosponsored by the International Foundation of Employee Benefit Plans and the Wharton School of the University of Pennsylvania.

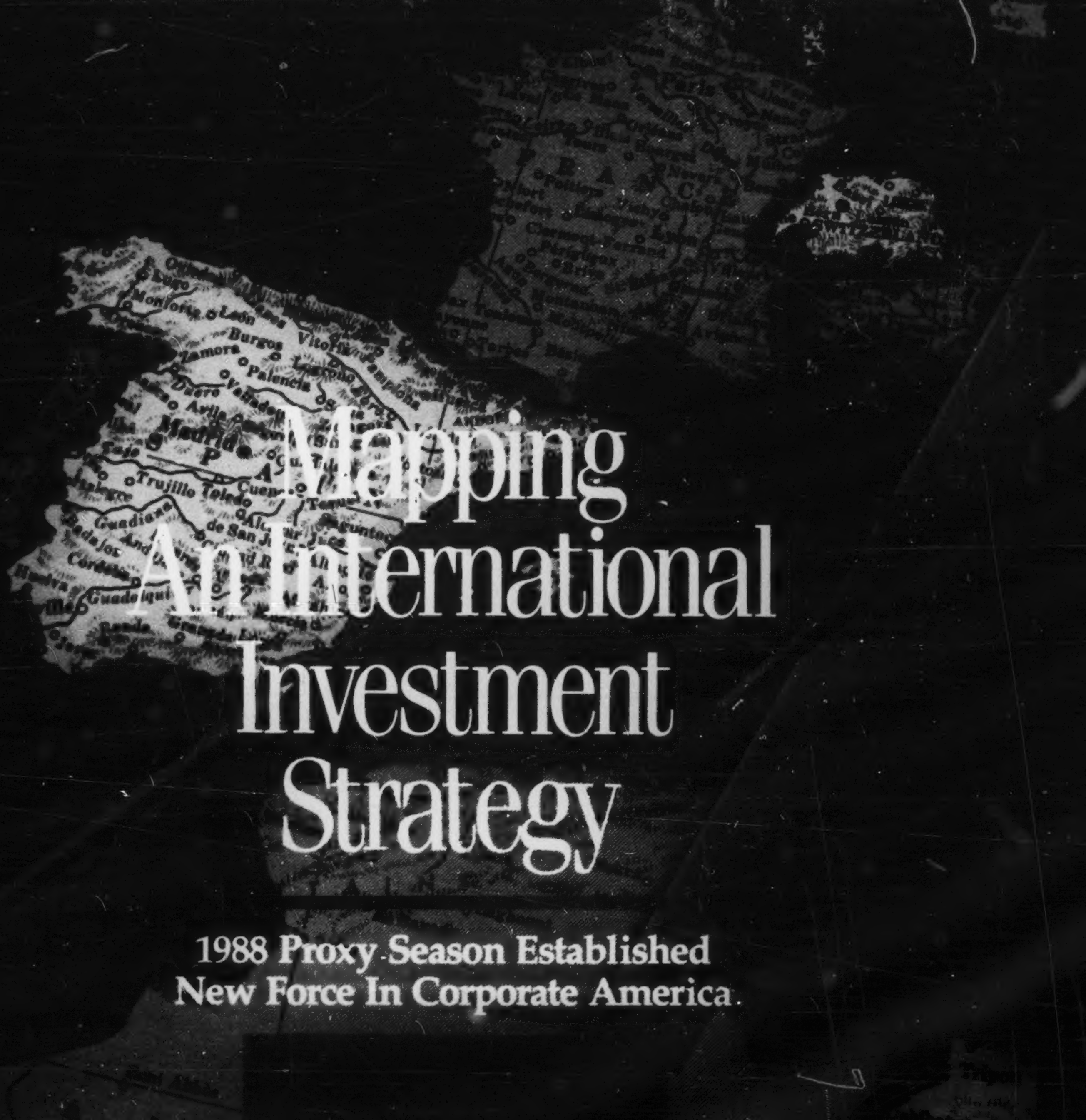
For more information, call the International Foundation at (414) 786-6700 and ask for the CEBS department, or write us at P.O. Box 69, Brookfield, WI 53008-0069.

CEBS

C2425-1

PENSION WORLD

Investment Managers • Plan Sponsors • Employee Benefits April 1989



Mapping An International Investment Strategy

1988 Proxy Season Established New Force In Corporate America

Investment Managers
• Plan Sponsors •
Employee Benefits
A Publication Of
Communication Channels, Inc.

PENSION WORLD

April 1989
Volume 25 Number 4

About The Cover: The U.S. pension funds are taking a closer look at foreign investment opportunities.

The map is a Copyright of American Map Corp., New York, No. 19305.

Photograph by Jerry Hoy, Double Vision, Inc., Atlanta.

COLUMNS

Insights 8
New York Update 10
Washington Update 12
Benefits 48
Investments 51
Plan Design 53
Cases & Rulings 55
Guest Viewpoint 58

DEPARTMENTS

Editor's Notes 4
Letters 6
World News 41
News Briefs 43
Executive Suite 44
Calendar 45
Technology Review 46
Resources 47

EMPLOYEE BENEFITS

Employers Can Control Prescription Drug Costs 14
By Bernard Handel
As prescription drug prices continue to increase, employers might want to consider implementing cost-containment programs.

A New Approach To Compensation 18
By Robert Kniceley
Compliance with Section 457 of the Internal Revenue Code, paying plan expenses and selecting investments can be touchy issues.

How To Calculate Minimum Distributions 20
By David C. Nearpass and Susan L. Gurny
Because the potential exists for plan disqualification, close attention should be paid to these rules.

INVESTMENTS

Multifamily Market Presents New Challenges To Managers 26
By William B. Hamilton and Bruce K. Klinger
Successful management firms study market changes and develop operating plans to capitalize on the opportunities.

Mapping An International Investment Strategy 30
By Gavin R. Dobson
While most of the money going overseas has been for equity investment, a large portion is being devoted to fixed income.

SuperShares May Replace Portfolio Insurance 33
By Phyllis Feinberg
SuperShares are being backed by some powerful financial organizations.

1988 Proxy Season Established New Force In Corporate America 36
By Thomas A. Aceituno
For corporate managers, it was a clear warning to pay more attention to the Superfunds.

Recordkeeping Industry Shakeout Expected To Continue 39
By Robert C. Montana II, John D. Kohley and Donald C. Brown
Sponsors who change vendors will need to evaluate an institution's commitment to this service.

BPA

PENSION WORLD (ISSN #0098-1753) is published monthly by Communication Channels, Inc., Jerrold France, President; Lawrence Moores, Executive Vice President; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *PENSION WORLD* is a registered trademark of Communication Channels, Inc. © 1989 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates: U.S., 1 year, $50; 2 years, $79; Outside U.S.A. (Surface Mail), 1 year, $70; Overseas Air Mail, $120. Single copies, $6. Group rates available. Directory copies: *PENSION WORLD* State Retirement Systems Survey (August), $9.95; *PENSION WORLD* Real Estate Portfolio Managers Directory (September), $9.95; *PENSION WORLD* Directory of Master and Directed Trust Services (December), $9.95; *PENSION WORLD* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *PENSION WORLD* are not necessarily those of the editors or publisher. Articles appearing in *PENSION WORLD* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *PENSION WORLD* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *PENSION WORLD*, 6255 Barfield Road, Atlanta, GA 30328.

Mapping An International Investment Strategy For The 1990s

While most of the money going overseas has been for equity investment, a large portion is being devoted to fixed income.

BY GAVIN R. DOBSON, Vice President and Portfolio Strategist
Kemper International Fund, Chicago

Gavin R. Dobson is a vice president and portfolio strategist with Kemper International Fund in Chicago. He also is a director and vice president of Kemper-Murray Johnstone International. He holds a M.A. degree in economics from Dundee University and a LL.B. degree from Edinburgh University in Scotland.

The case for international investing has often been made. In fact, in dollar terms, there has not been one quarter in the 1980s in which the Standard & Poor's 500 has not been beaten by at least one foreign market, in dollar terms. Additionally, there has not been one year in the last 30 years in which the U.S. stock market has been the best-performing market in the world.

Today, the U.S. stock market represents 29 percent of the total world capitalization. In 1970 the market represented 66.3 percent of the total world capitalization. While many smaller markets are now coming on stream for investment, the United States is retiring a significant percentage of equity through mergers, leveraged buyouts and stock buy backs. Thus, these other markets are still in the first flush of their stock market era.

Additionally, many foreign companies are world leaders in their fields. Therefore, it is important to be aware of the foreign competition even when constructing a U.S. portfolio. After all, the largest food company in the world is Swiss (Nestle), the largest consumer electronics company is Japanese (Matsushita), the largest advertising firm is British (Saatchi & Saatchi), and the largest power engineering firm is Swedish (Asea-Brown Boveri).

Also, the international bond markets can produce excellent dollar-adjusted perfomances over time. According to Salomon Brothers, New York, the U.S. government bond index rose 7.04 percent in 1988. However, the Canadian bond index rose 19.41 percent in U.S. dollar terms and the Australian bond index 28.79 percent.

The Salomon Brothers currency-hedged index showed returns of 8.88 percent for Deutschmark bonds, 10.27 percent for Yen bonds, 9.28 percent for Dutch Guilders and 15.04 percent for French Franc government bonds. These results indicate that a combination of hedged and unhedged portfolios, in addition to a foreign fixed-income portfolio, can produce excellent dollar-adjusted performance.

Indeed, this fact is being recognized by investors. Since December 1980, U.S. pension assets overseas have grown from $6 billion to $57 billion (December 1988). And InterSec estimates that this figure will reach $70 billion by the end of this year.

In the past, corporate pension funds were the main investors overseas. In most cases, these corporations (Amoco, IBM, etc.) were multinationals that were familiar and comfortable with the concept of international markets.

In contrast, a significant number of public and private funds now invest part of their pension assets overseas. Funds as diverse as The Philadelphia Municipal Workers, Colorado Police and Fire, The Rhode Island Retirement System and the Illinois Teachers Retirement Fund have committed funds overseas.

While most of the money going overseas has been for equity investment, a significant portion is now being devoted to fixed income. For example, the New York Employees devoted more than $200 million to a passive overseas bond manager last year and the New Hampshire Retirement System devoted $30 million to global bond management.

Meanwhile, corporate pension funds are steadily raising their international exposure as well. Pacific Telesis, Pacific Power & Light, Libby-Owens-Ford, Fort Howard Paper, Baxter Travenol, Conrail, Unocal, Shell, Nalco, ITT and Maytag added international managers in 1988.

Indeed, there is no question that the long-term trend of internationalizing U.S. pension funds is gathering speed. However, it will be a long time before U.S. pension funds approach the percentage they have invested overseas to that of their foreign counterparts. For instance, a typical British pension fund has 21 percent invested overseas, while a typical U.S. government or municipal fund has 1.4 percent invested in foreign markets. While there is a long way to go, there is every reason to be positive that a massive amount of U.S. pension fund money will go abroad in the next 10 years.

This trend is expected to redress the balance sheet of the United States. As interest payments and dividends are remitted back to the United States, they constitute an increasing "invisible export" for the United States that significantly helps the "debtor nation" status of the country.

With the possible exception of Japan, specific investment opportunities for the 1990s look optimistic for the United States. There is no question that Japan has been the financial phenomenon of the 1980s. While the U.S. equity market capitalization has sunk from 66.3 percent in 1970 to 29.1 percent in 1988, Japan has risen from a mere 4.6 percent to an astronomical 44.1 percent of the world's market capitalization. Indeed, Japan has been one of the best "buy and hold" investments of the 1980s.

But what about the 1990s? In 1980, the Nikkei Dow Jones Index was at 7000. Today it is at 30500. It is unlikely that a similar performance spurt will occur in the 1990s. It is more likely that the law of gravity will begin to operate in Tokyo, and that other markets will experience superior performance.

Of particular interest outside the United States are two specific areas: Europe and other emerging markets. The deregulation of financial, fiscal and national structures that is taking place in Europe is going to keep rolling for a number of years. This will open pockets of inefficiency and financial opportunities for investors.

Already pan-European takeover activity is galloping along, as companies position themselves for 1992 and beyond. Interestingly, non-EEC companies are being as aggressive in Europe as EEC companies. For example, 3M (U.S.) bought Spontex (France); Echlin (U.S.) bought Quinton Hazell (U.K.); Atlantic Richfield (U.S.) bought Tricentrol (U.K.); Electrolux (Sweden) bought Zanussi (Italy).

In addition, the influx of outside capital to enable non-EEC companies to manufacture and compete within the EEC will probably accelerate well into the 1990s. In this area, companies such as Toyota, Nissan, Ford and GE are well-positioned.

Photograph by Jerry Hoy, Double Vision Inc., Atlanta. The map is a copyright of American Map Corp., New York, No. 19305.

All this activity suggests strong financial markets in the 1990s. As a result, an international portfolio should not be underweighted in Europe.

In terms of other emerging markets, there are various categories from the highly investable like Korea, Thailand and Malaysia, to the long-term hopes like India and Zimbabwe. In many of these markets, a continuing maturity can be seen as these countries evolve into front-line investment havens. The criteria for this accolade would include: the absence of foreign exchange controls; efficient and honest settlement systems; a commitment to capitalism; a non-bureaucratic, but well-policed market; liquidity; and marketability.

The trend with most emerging markets in the 1980s has been that a tightly controlled closed-end fund has been launched as the first access by foreigners to the markets. Thus, the Korea Fund, Chile Fund and India Fund serve as their respective market flagships.

In the 1990s, many emerging markets can be expected to open as their economies mature. This could lead to some spectacular performances. As far as pension investment is concerned, the long-term rewards for the early investors will be significant. Yet, it is doubtful that the majority of pension funds will participate.

Overall, there is a positive outlook for U.S. pension fund investment internationally in the 1990s. Historically, international investment has been a sound choice with excellent diversification characteristics and good performances. It is likely that with the worldwide deregulation and financial cooperation taking place, the international markets, on the whole, will be a promising investment for pension funds in the 1990s. ☐

TABLE 2

Total Returns In U.S. Dollars For The Month Of October And Nov. 1 - Dec. 31, 1987

	OCTOBER	NOV 1 - DEC 31
United States	(21.2)	(2.1)
Canada	(22.0)	4.9
United Kingdom	(21.5)	7.2
Germany	(17.6)	(7.8)
France	(18.4)	(1.9)
Switzerland	(17.6)	(3.5)
Belgium	(18.9)	2.0
Italy	(12.1)	(2.1)
Sweden	(17.5)	(6.1)
Norway	(27.9)	(15.5)
Denmark	(7.5)	8.0
Spain	(20.6)	13.4
Austria	(9.4)	8.4
Netherlands	(17.4)	0.1
Japan	(7.5)	5.4
Hong Kong	(43.4)	5.6
Singapore	(41.3)	7.5
Australia	(44.5)	14.1
Ranking Of U.S. Market	12/18	13/18

Source: Morgan Stanley Capital International

TABLE 1

Annualized Country Index Total Returns

Equity Markets - U.S. Dollars

	1960-1970	1970-1980	1980-1985	1986	1987	1988
United States	4.0	8.0	14.9	17.4	5.1	15.8
Canada	5.0	11.9	5.5	10.7	14.6	18.0
United Kingdom	2.5	11.0	13.0	27.1	36.5	7.1
Germany	1.3	8.8	24.5	37.2	(23.4)	23.1
France	(0.7)	9.2	13.1	80.7	(12.6)	40.2
Switzerland	5.3	10.8	15.5	34.3	(8.8)	7.1
Belgium	0.6	13.0	22.6	83.9	10.9	57.9
Italy	(1.6)	0.3	14.1	109.4	(20.8)	12.5
Sweden	2.4	8.1	26.4	66.7	2.7	49.3
Norway	5.4	14.4	13.4	(1.7)	6.3	43.3
Denmark	(0.2)	12.1	17.8	2.0	14.0	4.0
Spain	11.1	(0.1)	10.2	123.0	37.8	14.2
Austria	3.8	11.9	13.3	35.2	2.7	1.1
Netherlands	2.1	11.5	20.1	42.3	8.2	15.5
Finland	—	—	—	—	—	14.3
Japan	5.6	18.4	19.3	99.7	43.2	35.5
Hong Kong	N/A	28.6	0.1	56.1	(4.1)	28.0
Singapore	N/A	22.8	(5.9)	45.2	2.3	33.3
New Zealand	—	—	—	—	—	(12.3)
Australia	6.5	7.9	(0.6)	43.8	10.3	38.1
Ranking Of U.S. Market	7/16	15/18	7/18	15/18	10/18	12/20

Source: Frank Russell Co.

PENSION WORLD

Celebrating Our 25th Anniversary

89 State Reti
Invest

Employee Benefits:
Incentive Deferrals: How To Leverage Benefit Dollars

Investment Managers
• Plan Sponsors •
Employee Benefits

A Publication Of
Communication Channels, Inc.

PENSION WORLD

August 1989
Volume 25 Number 8

25th Anniversary

About The Cover: This month's issue is a salute to PENSION WORLD's involvement in the pension fund and benefits industry for the past 25 years. Cover story begins on page 14.

COLUMNS

Insights 8
New York Update 10
Washington Update 12
Plan Design 47
Investments 52
Benefits 54
Cases & Rulings 55
Guest Viewpoint 58

DEPARTMENTS

Editor's Notes 4
Publisher's Notes 6
World News 40
News Briefs 42
Executive Suite 43
Resources 44
Calendar 45
Technology Review 46

INVESTMENTS

PENSION WORLD Marks 25th Anniversary 14
By Steven E. Schanes
There have been a number of major changes in the pension and benefits field since 1964.

A New Generation Of GIC Products 16
By Kenneth L. Walker
GIC optimists see a new era ahead, one where creative thinking will change the way GICs are bought and sold.

Trust Industry Expected To Be Bigger, Better 17
By David J. Pittman
In the future, trust banks will focus on particular niches, clients or products.

How To Stay Solvent, Sane Managing Small Funds 19
By Michael Stolper
For business owners, retirement plan interest will be a large item.

1986 Tax Reform: Pension Vesting Marches On 22
By William J. McDonnell
All qualified retirement plans must adopt liberal vesting schedules beginning with the 1989 plan year.

1989 State Retirement System Investment Survey 25
PENSION WORLD Exclusive Survey
This survey outlines the investment practices of public-employee, teacher, police and other government funds.

EMPLOYEE BENEFITS

Incentive Deferrals: How To Leverage Benefit Dollars 34
By David F. Lincoln
Corporations' limited ability to provide for the highly compensated has resulted in a growth of non-qualified plans.

State Employee Health Plan Costs Rise 20% 36
By John P. Mackin
For many insured plans, recent rate increases reflect the attempts by insurers to recoup previous losses.

BPA

PENSION WORLD (ISSN #0098-1753) is published monthly by Communication Channels, Inc., Jerrold France, President; Lawrence Moores, Executive Vice President; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *PENSION WORLD* is a registered trademark of Communication Channels, Inc. © 1989 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates: U.S., 1 year, $50; 2 years, $79; Outside U.S.A. (Surface Mail), 1 year, $70; Overseas Air Mail, $120. Single copies, $6. Group rates available. Directory copies: *PENSION WORLD* State Retirement Systems Survey (August), $9.95; *PENSION WORLD* Real Estate Portfolio Managers Directory (September), $9.95; *PENSION WORLD* Directory of Master and Directed Trust Services (December), $9.95; *PENSION WORLD* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *PENSION WORLD* are not necessarily those of the editors or publisher. Articles appearing in *PENSION WORLD* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *PENSION WORLD* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *PENSION WORLD*, 6255 Barfield Road, Atlanta, GA 30328.

1989 State Retirement System Investment Survey

This directory outlines the investment practices of public-employee, teacher, police and other government retirement funds.

The 1989 State Retirement System Investment Survey, compiled by the Directory Department of PENSION WORLD, provides information on the investment practices of public-employee retirement systems, teacher and school-employee retirement systems, police and firefighter retirement systems, as well as other government retirement funds. However, the survey does not cover retirement systems of cities or individual municipalities.

This year's survey reports on 76 systems in 43 states. Last year's survey included 65 systems from 42 states. This year, PENSION WORLD mailed questionnaires to 130 statewide systems in March, giving the survey a 58.5 percent rate of return. The respondents included statewide public-employee retirement systems, educational retirement systems, umbrella-type retirement systems, as well as a host of other types of systems.

The assets of the retirement systems that responded to the survey ranged from $16 million for the Arkansas Judicial Retirement System to $48.3 billion for the California Public Employees Retirement System. Because some systems reported assets at cost, while other systems used market figures for their values, a sum of the total assets represented in the survey cannot be reported.

Generally, most of the retirement systems invested in common or preferred stock. In most cases, when this asset class was utilized, it represented the fund's largest investment. Other investments used by most of the funds were U.S. government securities and agencies, corporate bonds, mortgages, other types of real estate investments, short-term instruments and cash. Additionally, some of the retirement funds utilized guaranteed investment contracts, international investments (equity and fixed income), leveraged buyout funds, venture capital funds and certificates of deposit.

A large majority of the funds also utilized some internal management of the investments. Indeed, 10 funds reported that they are 100 percent internally managed. In last year's survey, 16 firms reported being managed 100 percent internally. In some cases, internal management was limited to certain investments, including short-term cash management.

Of the reporting retirement funds that utilize discretionary investment managers, the systems using the most were: the California Public Employees Retirement System, Florida Board of Administration, Minnesota State Board of Investment, Oregon Public Employees Retirement System, Pennsylvania State Employees Retirement System, Teachers Retirement System of the state of Illinois, Illinois Municipal Retirement Fund, Iowa Public Employees Retirement System, Kansas Public Employees Retirement System, and Public Employees Retirement System of Nevada.

The following listings are based on the information provided by the individual funds to the Directory Department of PENSION WORLD. While the magazine has attempted to prepare this information as carefully as possible, PENSION WORLD assumes no responsibility for the accuracy of the information presented in the listings.

The information contained in the 1989 State Retirement System Investment Survey was compiled by Barbara Katinsky, managing editor of the Directory Department, and John Mason, listings editor.

RETIREMENT SYSTEMS OF ALABAMA

135 South Union St.
Montgomery, AL 36130
Contact: Dr. David G. Bronner, Chief Executive Officer, (205) 832-4140

Information current as of 3/31/89; all figures at book value

Total assets: $7.4 billion
Common and preferred stock: $810.7 million
U.S. government securities and agencies: $232.0 million
Corporate bonds: $2.7 billion
Mortgages: privately held—$1.4 billion; government backed—$479.1 million
Cash and short-term securities: $790.1 million
Other investments: GIC $6.7 million; GICs $1 billion, privately placed
Percent of fund internally managed: 100%
Investment advisor: AmSouth Bank

ARIZONA STATE RETIREMENT SYSTEM

P.O. Box 33910
3815 N. Black Canyon Highway
Phoenix, AZ 85015
Contact: C. Douglas Lemon, Investment Director, (602) 255-5131

Information current as of 6/30/88; all figures at market value

Total assets: $6.4 billion
Common and preferred stock: $2.7 billion
U. S. government securities and agencies: $2.4 billion
Corporate bonds: $348.5 million
Mortgages: privately held—$230.3 million
Other real estate: $2.3 million
Cash and short-term securities: $590.7 million
Other investments: $45.3 million
Percent of fund internally managed: 1.2%
Discretionary investment managers: Invesco; Criterion; Fiduciary Trust; Boston Co.; Wells Fargo; Warburg-Global; IDS Advisory; J.P. Morgan

ARKANSAS STATE HIGHWAY EMPLOYEES RETIREMENT SYSTEM

P.O. Box 2261
Little Rock, AR 72203
Contact: Larry Dickerson, Executive Secretary, (501) 569-2515

Information current as of 3/31/89

Total assets: $264 million
Common and preferred stock: $83 million
U.S. government securities and agencies: $66 million
Corporate bonds: $90 million
Cash and short-term securities: $7 million
Investment advisors: Loomis Sayles & Co. Inc.

ARKANSAS TEACHER RETIREMENT SYSTEM

Education Bldg. West
#3 Capitol Mall
Little Rock, AR 72201
Contact: Mavolene C. Booth, Retirement Fund Investment Manager, (501) 682-1517

Information current as of 2/28/89

Total assets: $1.9 billion
Common and preferred stock: $657.4 million
U.S. government securities and agencies: $757.5 million
Corporate bonds: $79.8 million
Mortgages: privately held—$40.8 million; government backed—$6.8 million
Cash and short-term securities: $297.8 million
Other investments: $.5 million, capital notes; $24.5 million, revenue bonds
Percent of fund internally managed: 16.1%
Investment advisors: Oppenheimer Capital; First Commercial Bank

ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

One Capitol Mall
Little Rock, AR 72201-1015
Contact: Kie D. Hall, Executive Director, (501) 682-7800

Information current as of 12/31/88

Total assets: $1.2 billion
Common and preferred stock: $479 million
U.S. government securities and agencies: $561 million
Corporate bonds: $129 million
Cash and short-term securities: $20 million
Other investments: $18 million, CDs; $25 million, taxable municipal bonds & bank capital notes
Investment advisor: Loomis, Sayles & Co. Inc.

ARKANSAS JUDICIAL RETIREMENT SYSTEM

One Capitol Mall
Little Rock, AR 72201-1015
Contact: Kie D. Hall, Executive Director, (501) 682-7800

Information current as of 12/31/88

Total assets: $16 million
Common and preferred stock: $4 million
U.S. government securities and agencies: $7.5 million
Corporate bonds: $2.5 million
Cash and short-term securities: $1.5 million
Other investments: $.5 million, taxable municipal bonds and bank capital notes
Investment advisor: Loomis, Sayles & Co. Inc.

ARKANSAS STATE POLICE RETIREMENT SYSTEM

One Capitol Mall
Little Rock, AR 72201-1015
Contact: Kie D. Hall, Executive Secretary, (501) 682-7800

Information current as of 12/31/88

Total assets: $74 million
Common and preferred stock: $26 million
U.S. government securities and agencies: $16.3 million
Corporate bonds: $22 million
Mortgages: government backed—$5 million
Cash and short-term securities: $3 million
Other investments: $.75 million, CDs; $1 million, bank capital notes
Discretionary investment manager: Loomis, Sayles & Co. Inc.

CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM

400 "P" Street, P.O. Box 2749
Sacramento, CA 95812-2749
Contact: Patricia Pinkos, Investment Manager, (916) 326-3400

Information current as of 2/28/89; all figures at market value

Total assets: $48.3 billion
Common and preferred stock: $21.8 billion
U.S. government securities and agencies: $3.0 billion
Corporate bonds: $7 billion
Mortgages: $2.6 billion—privately placed; $8 billion—government backed
Other real estate: $2.9 billion
Cash and short-term securities: $2.9 billion
Percent of fund internally managed: 91%
Discretionary investment managers: International investment managers: Baring International Investment Ltd.; County Natwest Investment Management Ltd.; Fidelity International Investment Advisors; Fiduciary Trust International; Morgan Grenfell Investment Services Ltd.; Nomura Capital Management Inc.; Oeschle International Advisors; Schroder Capital Management International; State Street Bank; Trust Company of the West; Warburg Investment Management International. Domestic investment managers: Atalanta/Sosnoff; Batterymarch Financial Management; Chancellor Capital Management Inc.; Dimensional Fund Advisors Inc.; First Chicago Investment Advisors; Lazard Freres Asset Management; RCM Capital Management; Roll & Ross Asset Management Corp.; Trust Services of America
Investment advisors: Real estate: Equitable Real Estate Investment Management; F.I.A. Associates; Heitman Advisory Corp.; LaSalle Investment Advisors; TCW Realty Advisors; Deloitte, Haskins and Sells; Roulac Consulting Group

CONNECTICUT STATE TEACHERS RETIREMENT

165 Capitol Ave.
Hartford, CT 06106
Contact: Francisco Borges, State Treasurer, (203) 566-5050

Information current as of 2/28/89

Total assets: $3.5 billion
Common and preferred stock: $1.6 billion
U.S. government securities and agencies: $200 million
Corporate bonds: $1.1 billion
Mortgages: $93.3 million
Other real estate: $500 million
Cash and short-term securities: $17 million
Other investments: $40 million
Percent of fund internally managed: 25%

FLORIDA STATE BOARD OF ADMINISTRATION

P.O. Drawer 5318
Tallahassee, FL 32303
Contact: Cliff Hinkle, Executive Director, (904) 488-4406

Information current as of 3/31/89; all figures at market value

Total assets: $16.1 billion
Common and preferred stock: $6.8 billion
U.S. government securities and agencies: $3.2 billion
Corporate bonds: $2.6 billion
Mortgages: $1.4 million—government backed
Other real estate: $740 million
Cash and short-term securities: $1.3 billion
Percent of fund internally managed: 62%
Discretionary investment managers: Equity: Alliance Capital Management; Ariel Capital Management; Barnett Banks Trust Co.; Barrow, Hanley, Mewhinney & Strauss Inc.; Bear Stearns Asset Management; Delaware Investment Advisers Inc.; Denver Investment Advisors; Eagle Asset Management; IDS Growth Spectrum Advisors; Lazard Freres Asset Management; Lazard Corporate Partners; The Prudential Asset Management Co. Inc.; Sun Bank Trust Banking Group; Westwood Management Corp. Fixed income managers: Alliance Capital Management; APAM Inc. Real estate managers: Aetna Life Insurance; Equitable Life Assurance Society; First National Bank of Chicago; Goldman Sachs; John Hancock

Mutual Life; LaSalle Fund II; Lehndorff & Babson; Prudential Insurance Co.; JMB Institutional Realty Corp.

GEORGIA RETIREMENT SYSTEMS

Two Northside 75, Suite 500
Atlanta, GA 30381
Contact: C.W. Cary, Director, (404) 656-2151

Information current as of 3/31/89

Total assets: $10.3 billion
Common and preferred stock: $3.7 billion
U.S. government securities and agencies: $5.3 billion
Corporate bonds: $890 million
Mortgages: $22 million
Other real estate: $5 million
Cash and short-term securities: $491 million
Percent of fund internally managed: 100%
Investment advisors: C&S; First Wachovia; Invesco Capital Management; Atlanta Capital; Wall, Patterson, Hamilton & Allen

GEORGIA PEACE OFFICERS A&B FUND

P.O. Box 56
Griffin, GA 30224
Contact: Flynt Langford, (404) 228-8461

Information current as of 12/31/88

Total assets: $82.1 million
Common and preferred stock: $30.2 million
U.S. government securities and agencies: $23.3 million
Corporate bonds: $24.7 million
Cash and short-term securities: $4 million
Discretionary investment managers: Wellington Management Co.

TEACHERS RETIREMENT SYSTEM OF GEORGIA

Two Northside 75, Suite 400
Atlanta, GA 30318
Contact: Charles W. Cary Jr., Director, Investment Services Division, (404) 656-2151

Information current as of 3/31/89

Total assets: $7.4 billion
Common and preferred stock: $2.6 billion
U.S. government securities and agencies: $3.8 billion
Corporate Bonds: $596 million
Mortgages: $15 million
Other real estate: $3 million
Cash and short-term securities: $354 million
Percent of fund internally managed: 100%
Investment advisors: C&S Investment Advisors; Invesco Capital Management; Thorndike, Doran, Paine & Lewis; Wall, Patterson, Hamilton & Allen; Atlanta Capital Management

EMPLOYEES RETIREMENT SYSTEM OF THE STATE OF HAWAII

888 Mililani St., Room 502
Honolulu, HI 96813
Contact: Stanley Siu, Secretary, (808) 548-7593

Information current as of 6/30/88

Total assets: $3.4 billion
Common and preferred stock: $1.4 billion
U.S. government securities and agencies: $383.7 million
Corporate bonds: $333.8 million
Mortgages: $376 million; $87.6 million—government backed
Other real estate: $121.1 million
Cash and short-term securities: $569.7 million
Other investments: $141.1 million
Percent of fund internally managed: 24%
Investment advisors: Equity: Alliance Capital Management Corp.; Atalanta/Sosnoff Capital; Barrow, Hanley, Mewhinney & Strauss; Cadinha & Co.; Delaware Investment Advisors; Denis Wong & Associates; Denney & Denney Inc.; Hanson Investment Management Co.; Invesco Capital Management; McCowan & Associates Inc.; Mellon Capital Management Corp. International equities: Daiwa International Capital Management Corp.; Nomura Capital Management Inc.; Schroder Capital Management International; Nikko & Associates Inc. Bonds: Lehman Management Co. Inc.; Pacific Investment Management Co.; Scudder, Stevens & Clark Inc.; Security Pacific Investment Managers; Wentworth, Hauser and Violich

TEACHERS RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

P.O. Box 19253
2815 West Washington
Springfield, IL 62794-9253
Contact: William M. Stephens, Chief Investment Officer, (217) 753-0370

Information current as of 3/31/89; all figures at book value

Total assets: $6.9 billion
Common and preferred stock: $2.9 billion
U.S. government securities and agencies: $1.1 billion
Corporate bonds: $952 million
Mortgages: $222 million—government backed
Other real estate: $767 million
Cash and short-term securities: $892 million
Other investments: $90 million
Discretionary investment managers: Alliance Capital Management Corp.; American National Bank; Ariel Capital Management; Bears Stearns Asset Management; Bennett & Kahnweiler Realty Investors; Cedar Hill Associates; Dreyfus Management; First Chicago Investment Advisors; Frontenac Co.; F.I.A. Associates; Jones Lang Wootton Realty Advisors; JMB Institutional Realty; Kemper Financial Services; Marine Investment Management; Matuschka Moser Partners; Pacific Investment Management; N.M. Rothschild International; State Street Bank; TCW Realty Advisors
Investment advisor: Callan and Associates

ILLINOIS MUNICIPAL RETIREMENT FUND

100 S. Wacker Drive
Chicago, IL 60606
Contact: Walter J. Koziol, Investment Manager, (312) 346-6722

Information current as of 12/31/88; all figures at market value

Total assets: $3.7 billion
Common and preferred stock: $1.3 billion
U.S. government securities and agencies: $206 million
Corporate bonds: $407 million
Mortgages: $86 million—government backed
Other real estate: $337 million
Cash and short-term securities: $968 million
Other investments: $112 million, foreign bonds; $288 million, foreign stock; $40 million, venture capital
Percent of fund internally managed: 5%
Discretionary investment managers: Abbot Capital Management; American National Bank; Baring International; Campbell, Cowperthwait & Co.; Centennial Fund; Criterion Investment Management; Dillon Read Capital; Dimensional Fund Advisors; Equitable Real Estate Management; Fidelity Management Trust; First Chicago Investment Advisors; Frontier Capital Management; JMB Institutional Realty; Julius Baer Investment Managememt; LaSalle Advisors; Lincoln Capital Management; Neuberger & Berman Pension Management; Nomura Capital Management; Oxford Venture Capital; Payden & Rygel; Provident Investment Counsel; Schroder Capital Management; Sentinel Corp.; TCW Realty Advisors

ILLINOIS STATE UNIVERSITIES RETIREMENT SYSTEM

50 Gerty Drive
Champaign, IL 61820
Contact: Kenneth E. Codlin, Investment Officer, (217) 333-3860

Information current as of 2/89

Total assets: $3.3 billion
Common and preferred stock: $1.8 billion
U.S. government securities and agencies: $700 million
Other real estate: $400 million
Cash and short-term securities: $400 million
Discretionary investment managers: Aetna Realty Investors Inc.; Pacific Investment Management Co.; Batterymarch Financial Management; Equitable Real Estate Investment Management Inc.; Fayez Sarofin & Co.; JMB Institutional Realty Corp.; The RREEF Funds; Wells Fargo Investment Advisors
Investment advisor: Ennis, Knupp & Associates

INDIANA PUBLIC EMPLOYEES' RETIREMENT FUND

143 West Market St., Suite 800
Indianapolis, IN 46204
Contact: Philip Barnes, Investments, (317) 636-7702

Information current as of 3/31/89

Total assets: $3.2 billion
U.S. government securities and agencies: $1.4 billion
Corporate bonds: $1.3 billion
Mortgages: $250 million—government backed
Cash and short-term securities: $255 million
Discretionary investment managers: Bank One Indianapolis; Indiana National Bank; Lehman Management Co.; Prime Capital Management; T. Rowe Price

INDIANA STATE TEACHERS' RETIREMENT FUND

506 State Office Building
Indianapolis, IN 46204
Contact: Robert D. Newland, Investment Officer, (317) 232-3868

Information current as of 12/31/88

Total assets: $1.5 billion
U.S. government securities and agencies: $480 million
Corporate bonds: $500 million
Mortgages: $410 million—government backed
Cash and short-term securities: $110 million
Discretionary investment managers: Alliance Capital Management; Bank One of Indianapolis; Bank of New York; Baxter & Hoops; Indiana National Bank; Merchants Investment Counseling

IOWA PUBLIC EMPLOYEES RETIREMENT SYSTEM

600 East Court
P.O. Box 9117
Des Moines, IA 50306
Contact: Larry Thompson, Investment Officer, (515) 281-5224

Information current as of 2/28/89; all figures at book value

Total assets: $4 billion

Common and preferred stock: $1.2 billion
U.S. government securities and agencies: $605 million
Corporate bonds: $720 million
Mortgages: $149 million—privately held; $206 million—government backed
Other real estate: $398 million
Cash and short-term securities: $415 million
Other investments: 336 million—Canadian bonds, venture capital & LBOs
Percent of fund internally managed: 10%
Discretionary investment managers: Capital Guardian Trust Co; Wellington Trust Co.; Mellon Capital Management; RCM Capital Management; Batterymarch Financial Management; Prudential Equity Asset Management Co.; Invista Capital Management Inc.; J.P. Morgan Investment Management Inc.; Loomis, Sayles & Co.; The Boston Co.; Criterion Investment Management Co.; Miller, Anderson & Sherrerd; Copley Real Estate Advisory; Heitman Advisory; JMB Institutional Realty Corp.; Aldrich, Eastman & Waltch
Investment advisor: Wilshire Associates; Institutional Property Consultants

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

Capitol Tower - Second Floor
400 West 8th
Topeka, KS 66603
Contact: Marshall Crowther, Executive Secretary, (913) 232-6665

Information current as of 3/31/89

Total assets: $3.2 billion
Common and preferred stock: $1.2 billion
U.S. government securities and agencies: $584.6 million
Corporate bonds: $377.3 million
Other real estate: $290 million
Cash and short-term securities: $531.8 million
Other investments: $206.1 million
Percent of fund internally managed: .5%
Investment advisors: Callan Associates Inc.; Capital Supervisors; Investment and Capital Management; Market Research and Management; Pilgrim Baxter Greig & Associates; Provident Investment Courses; Reimer, Kogor and Associates; Peter Gamm & West; Pacific Investment Management Co.; Loomis, Sayles; J.W. O'Connor; Payden & Rygel; Nomura Capital Management; Alliance Capital Management; Julius Baer Investment Management; Marine Midland; Bankers Trust

KENTUCKY RETIREMENT SYSTEMS

151 Elkhorn Court
Frankfort, KY 40601
Contact: Marlene Castle, Investment Officer, (502) 564-7049

Information current as of 2/28/89; all figures at market value

Total assets: $2.8 billion
Common and preferred stock $894 million
U.S. government securities and agencies: $462 million
Corporate bonds: $263 million
Mortgages: $387.2 million—government backed; $3.8 million—privately held
Other real estate: $93.6 million
Cash and short-term securities: $705 million
Percent of fund internally managed: 39%
Investment advisors: Capital Supervisors Inc.; Munder Capital Management; Heitman Advisory Corp.

KENTUCKY TEACHERS' RETIREMENT SYSTEM

479 Versailles Road
Frankfort, KY 40601-3868
Contact: Stuart A. Reagan, Deputy Executive Secretary, (502) 564-2057

Information current as of 4/27/89

Total assets: $3.1 billion
Common and preferred stock: $725 million
U.S. government securities and agencies: $1.3 million
Corporate bonds: $571 million
Mortgages: $93 million—government backed
Other real estate: $38 million
Cash and short-term securities: $342 million
Percent of fund internally managed: 8%
Investment advisors: Todd Investment Advisors; Invesco Capital Management; First Kentucky Co.

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF LOUISIANA

6750 Van Gogh Ave.
Baton Rouge, LA 70806
Contact: William C. Toadvin, Administrative Director, (504) 925-4810

Information current as of 6/30/88

Total assets: $182 million
U.S. government securities and agencies: $160 million
Corporate bonds: $1.2 million
Mortgages: government backed—$2.9 million
Cash and short-term securities: $4 million
Other investments: $18 million
Discretionary investment manager: Premier Bank

LOUISIANA SCHOOL EMPLOYEES' RETIREMENT SYSTEM

8401 United Plaza Blvd., #270
P.O. Box 44516, Capitol Station
Baton Rouge, LA 70804
Contact: Larry D. Quisenberry, Director, (504) 925-6484

Information current as of 2/28/89

Total assets: $607.3 million
Common and preferred stock: $22.5 million
U.S. government securities and agencies: $190.8 million
Corporate bonds: $250.9 million
Cash and short-term securities: $142.5 million
Other investments: $6 million
Percent of fund internally managed: 1%
Discretionary investment manager: Hibernia National Bank

LOUISIANA STATE EMPLOYEES RETIREMENT SYSTEM

8401 United Plaza Blvd., First Floor
Baton Rouge, LA 70809
Contact: Vernon L. Strickland, Chief Investment Officer, 504 922-0639

Information current as of 2/28/89

Total assets: $2 billion
Common and preferred stock: $514 million
U.S. government securites and agencies: $769 million
Corporate bonds: $469 million
Other real estate: $70 million
Cash and short-term securities: $192 million
Other investments: $36 million
Percent of fund internally managed: 30%
Discretionary investment managers: Duff & Phelps; Denver Investment Advisors; Invesco Capital Management; The Boston Co.; Eagle Asset Management; Merus Capital Management

MAINE STATE RETIREMENT SYSTEM

State House Station #46
Augusta, ME 04333
Contact: Claude R. Perrier, Executive Director, (207) 289-3461

Information current as of 3/31/89; all figures at market value

Total assets: $1.6 billion
Common and preferred stock: $679.5 million
Corporate bonds: $436.2 million
Other real estate: $41.6 million
Cash and short-term securities: $346.8 million
Other investments: $1.8 million—oil & gas; $50 million—international equity
Discretionary investment managers: Alliance Capital; Mass Finance Putnam; First Reserve; Gouws, PCA Realty, Morgan Guaranty; Evans & Moxon; Dillon Read; Columbus Circle; Lehman Management; Bankers Trust; State Street
Investment advisor: Wilshire Associates

MARYLAND STATE RETIREMENT AND PENSION SYSTEMS

301 W. Preston St., Room 901A
Baltimore, MD 21201
Contact: Howard J. France, Chief Investment Officer, (301) 225-1024

Information current as of 3/31/89

Total assets: $9.6 billion
Common and preferred stock: $3.3 billion
U.S. government securities and agencies: $3.2 billion
Corporate bonds: $2.3 billion
Mortgages: privately held—$38.8 million; government backed—$169.1 million
Other real estate: $233.7 million
Cash and short-term securities: $222.1 million
Other investments: $23.1 million
Percent of fund internally managed: 77.5%
Discretionary investment managers: Capital Guardian; Dimensional Fund Advisors; Hagler, Mastrovita & Hewitt; Investment Counselors of Maryland; Mercantile-Safe Deposit & Trust Co.; Pacific Investment; Scudder, Stevens & Clark; Standish, Ayer & Wood; Wellington Trust.

STATE OF MICHIGAN RETIREMENT SYSTEM

Michigan Department of Treasury
P.O. Box 15128
Lansing, MI 48901
Contact: Barry L. Stevens, Acting Director, (517) 373-3140

Information current as of 3/31/89

Total assets: $15.3 billion
Common and preferred stock: $7.2 billion
U.S. government securities and agencies: $2.5 billion
Corporate bonds: $2.5 billion
Mortgages: $266 million—privately held; $619 million—government backed
Other real estate: $872 million
Cash and short-term securities: $1.1 billion
Other investments: $378 million
Percent of fund internally managed: 98%

MINNESOTA STATE BOARD OF INVESTMENT

Room 105 MEA Building
55 Sherburne Avenue
Saint Paul, MN 55155
Contact: Howard J. Bicker, Executive Director, (612) 296-3328

Information current as of 12/31/87; all figures at market value

Total assets: $10.4 billion

Common and preferred stock: $4 billion
Corporate bonds: $5 billion
Other real estate: $480 million—equity
Cash and short-term securities: $676 million
Other investments: $180 million—venture capital and resource funds
Percent of fund internally managed: 47%
Discretionary investment managers: External equity: Alliance Capital Management; BMI Capital Corp.; Concord Capital Management; Forstmann Leff Associates; Franklin Portfolio Associates Trust; IDS Advisory; Investment Advisers Inc.; Lieber & Co.; Rosenberg Institutional Equity Management; Sasco Capital Inc.; Waddell & Reed; Wilshire Associates. External fixed income: Investment Advisers Inc.; Lehman Management Co. Inc; Miller, Anderson Sherrerd; Morgan Stanley Asset Management; Western Asset Management; Fidelity Management Trust; Lincoln Capital Management Co. Alternative investment: The Equitable Life Assurance Society of the United States; Aetna Life Insurance Co.; Prudential Asset Management Co. Inc.; Heitman Advisory Corp.; The RREEF Funds; TCW Realty Advisors; State Street Bank and Trust Co. Venture capital: Norwest Venture Capital Management Inc.; Kohlberg Kravis Roberts and Co.; Smith Barney Venture Corp.; Stamps, Woodsum and Co.; DSV Partners; Matrix Management Co.; Inman Bowman Partners; Allied Advisory, Inc.; Investment Advisers Inc.; T. Rowe Price Associates Inc.; Golder, Thoma, Cressey; First Chicago Investment Advisors. Oil and gas: First Reserve Capital Management Corp.; Apache Corp.; J.P. Morgan Investment Management Inc.; British Petroleum. Minnesota supplemental investment fund GIC account: Principal Mutual Life Insurance Co.; Mutual of America
Investment advisor: Richards & Tierney Inc.

MINNESOTA STATE TEACHERS RETIREMENT ASSOCIATION

17 West Exchange St.
Suite 500, Gallery Building
St. Paul, MN 55103
Contact: Howard Bicker, Executive Director/State Board of Investment; (612) 296-3328

Information current as of 6/30/88

Total assets: $2 billion
Common and preferred stock: $1.1 billion
U.S. government securities and agencies: $511.7 million
Other real estate: $165.8 million
Cash and short-term securities: $137.4 million
Other investments: $58.8 million—venture capital; $38 million—resource

PUBLIC EMPLOYEES RETIREMENT SYSTEM OF MISSISSIPPI

429 Mississippi Street
Jackson, MS 39201-1005
Contact: Eddie B. Vandiver, Deputy Director/Investments, (601) 359-2255

Information current as of 3/31/89; all figures are market value

Total assets: $3.6 billion
Common and preferred stock: $1.1 billion
U.S. government securities and agencies: $1.5 billion
Corporate bonds: $534 million
Cash and short-term securities: $489 million
Discretionary investment managers: Dreyfus Management Inc.; Lehman Management Co.; Pacific Investment Management Co.; Bankers Trust Co.; Invesco Capital Management Inc.; Sun Bank; Criterion Investment Management Co.; Dimensional Fund Advisors Inc.; Wells Fargo Investment Advisors; Fayez Sarofim & Co.; The Boston Co.; GeoCapital Corp.

MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

P.O. Box 1665
Jefferson City, MO 65102
Contact: Keith E. Hughes, (314) 751-3666

Information current as of 12/31/88; all figures at book value

Total assets: $548.8 million
Common and preferred stock: $192.2 million
U.S. government securities and agencies: $182.6 million
Corporate bonds: $37.6 million
Other real estate: $16.6 million
Cash and short-term securities: $106.1 million
Other investments: $13.7 million
Discretionary investment managers: Equity: Delaware Investment Advisers; Invesco Capital Management; Loomis, Sayles and Co. Fixed income: Centerre Trust Co.; Hoisington Investment Management; Investment Advisers; Lehman Management Co.; United Missouri Investment Counsel Service. Real estate: JMB Institutional Realty; JP Morgan Investment Management; New England Life Copley Real Estate Advisors; TCW Realty Advisors.
Investment advisors: Prudential-Bache Securities Inc.; Institutional Property Consultants Inc.

THE PUBLIC SCHOOL RETIREMENT SYSTEM OF MISSOURI

Box 268
Jefferson City, MO 65101
Contact: Dr. David Mustoe, Executive Secretary, (314) 751-3414

Information current as of 12/31/88

Total assets: $4.3 billion
Common and preferred stock: $500 million
U.S. government securities and agencies: $1.6 billion
Corporate bonds: $1.7 billion
Mortgages: $5 million—government backed
Cash and short-term securities: $495 million
Investment advisors: DeMarche & Associates

MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

P.O. Box 209
Jefferson City, MO 65102
Contact: M. Steve Yoakum, Executive Director, (314) 751-2342

Information current as of 4/28/89

Total assets: $1.3 billion
Common and preferred stock: $668 million
U.S. government securities and agencies: $246 million
Corporate bonds: $126 million
Mortgages: $23 million—privately held; $4 million—government backed
Other real estate: $83 million
Cash and short term securities: $145 million
Other investments: $23 million
Discretionary investment managers: Alliance Capital Management Corp.; CFW Management Co.; Investors Research Corp.; Delaware Investment Advisors; Shields Asset Management; First Chicago Investment Advisors; Eastdil Realty Inc.; Loomis, Sayles & Co.; Wentworth, Hauser & Violich; Boatmen's Trust Co.; The Kirk Organization

MONTANA PUBLIC EMPLOYEES RETIREMENT SYSTEM

555 Fuller, Capitol Station
Helena, MT 59601
Contact: Dave Lewis, Executive Director, (406) 442-1970

Information current as of 6/30/88; all figures at book value

Total assets: $664 million
Common and preferred stock: $62 million
U.S. government securities and agencies: $64 million
Corporate bonds: $448 million
Mortgages: $64 million—privately held
Cash and short-term securities: $26 million
Other investments: $.3 million—venture capital; $4.2 million—LBOs
Percent of fund internally managed: 99.9%
Discretionary investment managers: First Chicago Advisors

MONTANA TEACHERS RETIREMENT SYSTEM

555 Fuller, Capitol Station
Helena, MT 59620
Contact: Dave Lewis, Executive Director, (406) 442-1970

Information current as of 6/30/88; all figures at book value

Total assets: $539 million
Common and preferred stock: $55 million
U.S. government securities and agencies: $52 million
Corporate bonds: $345 million
Mortgages: $55 million—privately held
Cash and short-term securities: $32 million
Other investments: $.2 million—venture capital; $3.5 million—LBO
Percent of fund internally managed: 99.9%
Discretionary investment managers: First Chicago Advisors

NEBRASKA INVESTMENT COUNCIL

107 Terminal Building
941 "O" Street
Lincoln, NE 68508
Contact: Donald J. Mathes, State Investment Officer, (402) 471-2043

Information current as of 3/31/89

Total assets: $844 million
Common and preferred stock: $405 million
U.S. government securities and agencies: $68 million
Corporate bonds: $45 million
Mortgages: $238 million—government backed
Other investments: $88 million
Percent of fund internally managed: 70%
Discretionary investment managers: Alliance Capital; Kirkpatrick; Pettis; First National Bank of Omaha; Trinity; Travelers Keystone; Investment Advisers; Travelers Insurance Co.
Investment advisor: Wilshire Associates

NEBRASKA SCHOOL EMPLOYEES RETIREMENT SYSTEM

301 Centennial Mall South
P.O. Box 94816
Lincoln, NE 68509
Contact: James Powers, Deputy Director, (402) 471-2053

Information current as of 6/30/88; all figures are book value

Total assets: $589 million
Common and preferred stock: $280 million
U.S. government securities and agencies: $189 million

Corporate bonds: $50 million
Cash and short-term securities: $69 million
Investment advisors: Investment Advisers; Keystone; Provident; Alliance; Invista Capital Management; KPSP; Trinity; Commerce Management

NEBRASKA STATE PATROL RETIREMENT SYSTEM

P.O. BOX 94816
301 Centennial Mall South
Lincoln, NE 68509
Contact: James J. Powers, Deputy Director, (402) 471-2053

Information current as of 6/30/88; all figures at book value

Total assets: $58 million
Common and preferred stock: $24 million
U.S. government securities and agencies: $23 million
Corporate bonds: $6 million
Cash and short-term securities: $5 million
Investment advisors: Investment Advisers; Keystone; Provident; Alliance; Invista Capital Management; KPSP; Trinity; Commerce Management

NEBRASKA JUDGES RETIREMENT SYSTEM

P.O. Box 94816
301 Centennial Mall South
Lincoln, NE 68509
Contact: James J. Powers, Deputy Director, (402) 471-2053

Information current as of 6/30/88; all figures at book value

Total assets: $27 million
Common and preferred stock: $11 million
U.S. government securities and agencies: $11 million
Corporate bonds: $3 million
Cash and short-term securities: $2 million
Percent of fund internally managed: 77%
Investment advisors: Investment Advisers; Keystone; Provident; Alliance; Invista Capital Management; KPSP; Trinity; Commerce Management

NEBRASKA STATE EMPLOYEES RETIREMENT SYSTEM

P.O. Box 94816
301 Centennial Mall South
Lincoln, NE 68509
Contact: James J. Powers, Deputy Director, (402) 471-2053
Information current as of 6/30/88; all figures at market value

Total assets: $208 million
Investment advisors: Ameritas; United of Omaha; KPSP

NEBRASKA COUNTY EMPLOYEES RETIREMENT SYSTEM

P.O. Box 94816
301 Centennial Mall South
Lincoln, NE 68509
Contact: James J. Powers, Deputy Director, (402) 471-2053

Information current as of 6/30/88; all figures at market value

Total assets: $34 million
Investment advisors: Ameritas; New York Life; United of Omaha; Hartford; KPSP

NEBRASKA DEFERRED COMPENSATION PLAN

P.O. Box 94816
301 Centennial Mall South
Lincoln, NE 68509
Contact: James J. Powers, Deputy Director, (402) 471-2053

Information current as of 6/30/88; all figures at market value

Total assets: $20 million
Investment advisor: Hartford

PUBLIC EMPLOYEES RETIREMENT SYSTEM OF NEVADA

693 West Nye Lane
Carson City, NV 89703
Contact: Laura Wallace, Investment Officer, (702) 885-4200

Information current as of 2/28/89

Total assets: $2.8 billion
Common and preferred stock: $982.6 million
U.S. government securities and agencies: $378.8 million
Corporate bonds: $246.2 million
Mortgages: $74.6 million—privately held; $140.9 million—government backed
Other real estate: $169.5 million
Cash and short-term securities: $731.1 million
Other investments: $7 million
Discretionary investment managers: Criterion Investment Management; Invesco; Loomis-Sayles; Wellington Management; Alliance Capital Management; Wells Fargo Investment Advisors; Axe Core Investors; Columbine Venture Fund; Bay Partners Venture Fund; Golder, Thoma, Cressey Venture Fund; Summit Ventures; Menlo Ventures; Balch-Hardy Scheinman; Bankers Trust; Putnam; State Street Management; Patterson Capital; Karsten Realty Advisors; Prudential Asset Management; J.P. Morgan Investment Management; PM Realty Advisors; Heitman Advisory; TCW Realty Advisors; JMB Institutional Realty
Investment advisors; Mercer-Meidinger-Hansen; Wilshire Associates; Callan Associates

STATE OF NEW JERSEY, DIVISION OF INVESTMENT

CN 290
349 West State Street
Trenton, NJ 08540
Contact: Roland Machold, Director, (609) 292-5106

Information current as of 4/30/89

Total assets: $26.4 billion
Common and preferred stock: $10.3 billion
U.S. government securities and agencies: $9.4 billion
Corporate bonds: $1.4 billion
Mortgages: $2.6 billion—government backed
Cash and short-term securities: $2.7 billion
Percent of fund internally managed: 100%

NEW MEXICO EDUCATIONAL RETIREMENT BOARD

P.O. Box 1029
Santa Fe, NM 87504-1029
Contact: John E. Young, Investment Officer, (505) 827-8030

Information current as of 2/28/89; all figures at book value

Total assets: $1.7 billion
Common and preferred stock: $68 million
U.S. government securities and agencies: $874 million
Corporate bonds: $585 million
Mortgages: $157 million—government backed
Cash and short-term securities: $36 million
Percent of fund internally managed: 100%
Investment advisors: Vaughan, Nelson, Scarborough & McConnell Inc.

NEW YORK STATE TEACHERS' RETIREMENT SYSTEM

10 Corporate Woods Drive
Albany, NY 12211
Contact: Edward J. Reno, Securities Investment Officer, (518) 447-2750

Information current as of 12/31/88; all figures at book value

Total assets: $21.7 billion
Common and preferred stock: $9.6 billion
U.S. government securities and agencies: $3.6 billion
Corporate bonds: $4.6 billion
Mortgages: $628 million—privately held; $1.1 million—government backed
Other real estate: $330 million
Cash and short-term securities: $757 million
Other investments: $1.1 billion
Percent of fund internally managed: 84%
Discretionary investment managers: Bernstein; Lehman; Oppenheimer; Beutel Goodman; Glickenhaus; General American
Investment advisor: Buck Consultants

NORTH CAROLINA RETIREMENT SYSTEMS

325 North Salisbury Street
Raleigh, NC 27611
Contact: C. Douglas Chappell, Director, (919) 733-7282

Information current as of 3/31/89

Total assets: $14.3 billion
Common and preferred stock: $3.5 billion
U.S. government securities and agencies: $2.9 billion
Corporate bonds: $6.6 billion
Mortgages: $1 billion—government backed
Other real estate: $188 million
Cash and short-term securities: $161 million
Percent of fund internally managed: 75%
Discretionary investment managers: Equity: Alliance Capital; Branch Bank and Trust Co.; Central Carolina Bank; Wellington Management Co. Real estate: NCNB National Bank; Wachovia Bank and Trust Co.; Cigna Capital; Sentinel Real Estate; Aetna Life Insurance; Goldman Sachs
Investment advisors: Equity: NCNB National Bank; Wellington Management Co.; Wachovia Bank and Trust Co.; First Citizens Bank; First Union National Bank

NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

P.O. Box 1214
Bismarck, ND 58501
Contact: Leroy Gilbertson, Financial Director, (701) 224-2173

Information current as of 3/27/89

Total assets: $327 million
Common and preferred stock: $140 million
U.S. government securities & agencies: $125 million
Other real estate: $15 million
Cash and short-term securities: $1 million
Other investments: $25 million
Discretionary investment managers: Equity managers: Sanford C. Bernstein & Co.; Investment Advisers Inc.; John McStay Investment Counsel; State Street Bank; Wilshire Associates. Fixed income managers: Bank of North Dakota; Criterion Investment Management Co.; Lehman Management Co. Inc.; Western Asset Management Co.

Real estate managers: JMB Institutional Realty Corp.; J.P. Morgan Investment Management Inc.; Trust Company of the West
Investment advisor: Callan Associates

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT
North Dakota State Investment Board
400 E. Broadway, Ste. 303
Bismarck, ND 58501
Contact: Laura Huber, Financial Analyst, (701) 224-4883

Information current as of 3/31/89; all figures at market value

Total assets: $370.1 million
Common and preferred stock: $130 million
U.S. government securities and agencies: $188.9 million
Mortgages: $7 million—privately held
Other real estate: $15.8 million
Cash and short-term securities: $34.7 million
Discretionary investment managers: Wilshire Asset Management; Bank of North Dakota; Sanford Bernstein; Criterion; Investment Advisors Inc.; Invesco Capital Management Inc.; Delaware Investment Advisors; Lehman Management Corp.

OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM
277 E. Town Street
Columbus, OH 43215
Contact: Robert A. McLaughlin, Investment Officer, (614) 466-7320

Information current as of 3/31/89

Total assets: $17.3 billion
Common and preferred stock: $3.7 billion
U.S. government securities and agencies: $5.1 billion
Corporate bonds: $64 million
Mortgages: $5.2 billion—government backed
Other real estate: $540 million
Cash and short-term securities: $2.6 million
Other investments: $24 million, venture capital
Percent of fund internally managed: 97%
Investment advisors: Bristol Group; CIGNA; NCNB; Rothschild Inc.; Sentinel; Wells Fargo

THE STATE TEACHERS RETIREMENT SYSTEM OF OHIO
275 East Broad Street
Columbus, OH 43215
Contact: Daniel M. Szente, Assistant Director, Investments, (614) 227-2979

Information current as of 3/31/89

Total assets: $15.4 billion
Common and preferred stock: $3.9 billion
U.S. government securities and agencies: $5.8 billion
Corporate bonds: $837 million
Mortgages: $1.1 billion—government backed
Other real estate: $1.8 billion
Cash and short-term securities: $1.6 billion
Other investments: $16.7 million, venture capital; $246.5 million, Canadian bonds; $64.9 million, miscellaneous bonds
Percent of fund internally managed: 98%
Investment advisor: Wellington Management Co.; Karsten Associates

SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO
45 North Fourth Street
Columbus, OH 43215
Contact: Paul M. Kubinsky, Director of Investments, (614) 221-7012

Information current as of 2/28/89

Total assets: $2.3 billion
Common and preferred stock: $705 million
U.S. government securities and agencies: $284 million
Corporate bonds: $218.5 million
Mortgages: $559.8 million—government backed
Other real estate: $305.5 million
Cash and short-term securities: $177.1 million
Other investments: $23.5 million
Percent of fund internally managed: 94%
Discretionary investment managers: Equitable Real Estate Investment Management Co.; Prudential Asset Management Group; NCNB Trust Group
Investment advisor: Mellon Capital Management Corp.

OHIO HIGHWAY PATROL RETIREMENT SYSTEM
4795 Evanswood Drive.
Columbus, OH 43229
Contact: R. Dean Huffman, Executive Director, (614) 466-2268

Information current as of 12/31/88

Total assets: $168.8 million
Common and preferred stock: $55.3 million
U.S. government securities and agencies: $52.4 million
Corporate bonds: $27.8 million
Mortgages: $24.8 million; $5.1 million—government backed
Cash and short-term securities: $3.4 million
Investment advisor: Duff & Phelps Investment Management Co.

POLICE AND FIREMEN'S DISABILITY AND PENSION FUND OF OHIO
230 East Town Street
Columbus, OH 43215
Contact: Theodore G. Hall, Investment Manager (614) 228-4076

Information current as of 3/31/88

Total assets: $2.6 billion
Common and preferred stock: $597.7 million
U.S. government securities and agencies: $640 million
Corporate bonds and private placements: $518.1 million
Mortgages: $304.9 million—government backed
Other real estate: $136.8 million
Cash and short-term securities: $339.5 million
Other investments: $13.4 million, venture capital; $42.4 million, Canadian bonds
Percent of fund internally managed: 71%
Discretionary investment managers: Atalanta/Sosnoff Capital Corp.; Axe Core Investors; Bankers Trust; Duff & Phelps; Loomis, Sayles; Oppenheimer; Society Bank; Value Line; Copley Real Estate Advisors; TA Associates Realty
Investment advisors: Schroder Real Estate Associates; Trident/Meyer Real Estate Advisors

OKLAHOMA PUBLIC EMPLOYEES RETIREMENT SYSTEM
P.O. Box 53007
Oklahoma City, OK 73152
Contact: Harold Sinclair, Deputy Director, (405) 521-2381

Information current as of 7/1/88; all figures are market value

Total assets: $1.3 billion
Common and preferred stock: $309 million
U.S. government securities and agencies: $800 million
Corporate bonds: $214 million
Cash and short-term securities: $3 million
Discretionary investment managers; The Northern Trust Co.; First Investment Management; Sun Bank Investment Management: J. McCapital Management; Wright Investor's Service
Investment advisor: SEI

OKLAHOMA TEACHERS RETIREMENT SYSTEM
P.O. Box 53524
Oklahoma City, OK 73152
Contact: Jo Witt, Investment Director, (405) 521-3462

Information current as of 3/31/89

Total assets: $1.8 billion
Common and preferred stock: $440.4 million
U.S. government securities and agencies: $715 million
Corporate bonds: $528.3 million
Cash and short-term securities: $114 million
Percent of fund internally managed: 7%

OKLAHOMA LAW ENFORCEMENT RETIREMENT SYSTEM
P.O. Box 11414
Oklahoma City, OK 73136-0415
Contact: Mary E. Haning, Executive Director, (405) 425-2136

Information current as of 3/1/89

Total assets: $128 million
Common and preferred stock: $32 million
U.S. government securities and agencies: $57 million
Cash and short-term securities: $39 million

OREGON PUBLIC EMPLOYEES' RETIREMENT SYSTEM
158 State Capitol
Portland, OR 97207-0073
Contact: James C. George, Investment Manager, (503) 378-4111

Information current as of 12/31/88

Total assets: $9.2 billion
Common and preferred stock: $4.4 billion
U.S. government securities and agencies: $815 million
Corporate bonds: $1.4 billion
Mortgages: $460 million
Other real estate: $424 million
Cash and short-term securities: $291 million
Other investments: $270 million—LBO; $872 million—international stocks; $66 million—venture capital
Percent of fund internally managed: 33%
Discretionary investment managers: Kohlberg, Kravis & Roberts; Globe-Finlay; Daiwa International Capital Management; Cursitor-Eaton Asset Management; Matushka, Moser Partners; Nomura Capital Management Inc.; Rowe, Price-Fleming International; Philippe Advisory Corp.; BEA Associates Inc.; Columbia Management Co.; Fayez Sarofim & Co.; General American Investors Inc.; Hotchkis & Wiley; Quest Advisory Corp.; Rosenberg Capital Management; Thompson/Rubinstein Investment Management; Franklin Asset Management; Batterymarch Financial Management; Cutler & Co. Inc.; Froley, Revy Investment Co. Inc.; Harris Associates; Olympic Capital Management; Pinnacle Associates Ltd.; George B. Springman; William D. Witter

Investment advisors: Kohlberg Kravis & Roberts; Alex. Brown Realty Advisors; Frank Russell Co.; Wilshire Associates

PENNSYLVANIA STATE EMPLOYEES RETIREMENT SYSTEM

909 Green St.
Harrisburg, PA 17102
Contact: Ken Mertz, Chief Investment Officer, (717) 783-9705

Information current as of 12/31/88; all figures at market value

Total assets: $8.1 billion
Common and preferred stock: $2.7 billion
Mortgages: $556 million—privately held; $242 million—government backed
Other real estate: $567 million
Cash and short-term securities: $1.4 billion
Other investments: $63 million—venture capital; $20 million—LBOs
Discretionary investment managers: Aetna Life Insurance Co.; APA/Fostin Pennsylvania Venture Capital Fund; Barrow, Hanley, Mewhiney & Strauss Inc.; Brentwood Associates Buyout Fund; Butcher & Singer/Keystone Venture II; CEO Venture Fund-S; Connecticut General Life Insurance Co.; Copley Real Estate Advisors; Corporate Property Investors; Delaware Investment Advisers; F.I.A. Associates Inc.; Fidelity Bank; Latimer & Buck Financial Services Inc.; First Pennsylvania Bank; Fostin Capital Associates; Geewax, Terker & Co.; Genesis Seed Fund Ltd.; Heitman Advisory Corp.; JMB Institutional Realty Corp.; John Hancock; Maverick Pennsylvania Fund; McGlinn Capital Management Inc.; Mellon Bank; Miller, Anderson & Sherrerd; Murphy & Fauver; NEPA Venture Fund; Payden & Rygel; Pennsylvania Fund #1; Pilgrim, Baxter, Greig and Associates; Pittsburgh Seed Fund; PNC Venture Group I; Provident Investment Counsel; Prudential Asset Management Co.; PSI Institutional Realty; Sentinel Corp.; Sun Bank; TDH II Limited; Trintity Investment Management Corp.; Wells Fargo Investment Advisors; W. R. Huff Asset Management; Zero Stage Capital II-Central Pennsylvania Limited Partnership

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM

P.O. Box 1165
Harrisburg, PA 17108
Contact: Jame B. Allen, Secretary, (717) 787-2065

Information current as of 1/1/89

Total assets: $225 million
Common and preferred stock: $97 million
U.S. government securities and agencies: $59 million
Corporate bonds: $28 million
Other real estate: $36 million
Cash and short-term securities: $5 million
Investment advisors: Fidelity Bank; Marine Bank; Newbold's Asset Management; Merrill Lynch; CIGNA Real Estate; JMB Realty; Prudential Real Estate
Investment advisor: Dahab Associates

PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM

Box 125
Harrisburg, PA 17108
Contact: Clay Mansfield, Chief Investment Officer, (717) 787-9060

Information current as of 12/31/88; all figures at market value

Total assets: $13.3 billion
Common and preferred stock: $4.7 billion
U.S. government securities and agencies. $3.5 billion
Corporate bonds: $1 billion
Mortgages: $1.1 billion—government backed
Other real estate: $700 million
Cash and short-term securities: $2.3 billion
Percent of fund internally managed: 6%
Discretionary investment managers: Equity: Mellon; Oppenheimer; Provident; Delaware Investment Advisers; Miller, Anderson, Sherrerd; Cashman, Farrell; Bankers Trust; Dreman Value Management; Mackenzie Financial Corp. Fixed income: Loomis Sayles; Pittsburgh National Bank; Mellon; Pimco; Criterion; Putnam; Miller, Anderson, Sherrerd; Glenmede; Delaware Advisors.
Investment advisors: Jones, Lang, Wootton; Fidelity Bank

EMPLOYEES RETIREMENT SYSTEM OF RHODE ISLAND

198 Dyer St.
Providence, RI 02903
Contact: Anthony J. Solomon, General Treasurer, (401) 277-2397

Information current as of 2/28/89

Total assets: $1.8 billion
Common and preferred stock: $800 million
U.S. government securities and agencies: $523 million
Corporate bonds: $127 million
Cash and short-term securities: $340 million
Other investments: $10 million
Discretionary investment managers: Bankers Trust; Alliance Capital; Fleet Bank; HT Investors; Van Liew Capital; Provident Investment Counsel

SOUTH CAROLINA RETIREMENT SYSTEM

P.O. Box 11778
Columbia, SC 29210
Contact: Shakun Tahiliani, Investment Coordinator, (803) 734-2641

Information current as of 12/31/88

Total assets: $5.7 billion
U.S. government securities and agencies: $2.6 billion
Corporate bonds: $1.6 billion
Mortgages: privately held—$217 million; government backed—$673 million
Cash and short-term securities: $593 million
Other investments: $4 million
Percent of fund internally managed: 100%
Investment advisor: Jamison Eaton & Wood Co.

SOUTH DAKOTA RETIREMENT SYSTEM

216 East Capital
Pierre, SD 57501
Contact: Steve Meyers, State Investment Officer, (605) 335-5023

Information current as of 6/30/88

Total assets: $1.1 billion
Common and preferred stock: $435 million
U.S. government securities and agencies: $313 million
Corporate bonds $105 million
Other real estate: $26 million
Cash and short-term securities: $180 million
Other investments: $32 million
Percent of fund internally managed: 89%
Discretionary investment managers: Dreman Value Management; Trinity; Bear Stearns; Frank Russell; Wachovia; Sentinel; Smith Vasiliou

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM

13th Floor, Andrew Jackson State Office Bldg.
Nashville, TN 37219
Contact: Chuck Webb, Chief Investment Officer, (615) 741-2643

Information current as of 6/30/88; all figures at book value

Total assets: $6 billion
Common and preferred stock: $1.8 billion
U.S. government securities and agencies: $1.7 billion
Corporate bonds: $1.4 billion
Mortgages: $2.4 million
Cash and short-term securities: $702 million
Other investments: $2 million
Percent of fund internally managed: 100%

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

P.O. Box 13207
Austin, TX 78711
Contact: Nancy G. Goerdel, Deputy Director of Investments, (512) 476-6431

Information current as of 2/28/89

Total assets: $5.1 billion
Common and preferred stock: $1.1 billion
U.S. government securities and agencies: $2.1 billion
Corporate bonds: $790 million
Mortgages: $998 million—government backed
Cash and short-term securities: $114 million
Percent of fund internally managed: 100%
Investment advisors: Invesco Capital Management; Duff & Phelps Investment Management Inc.; Wilshire Associates

TEXAS COUNTY & DISTRICT RETIREMENT SYSTEM

400 West 14th St.
Austin, TX 78701
Contact: Ronald Schultz, Investment Consultant, (512) 479-6021

Information current as of 12/31/88

Total assets $1.9 billion
U.S. government securities and agencies: $1 billion
Corporate bonds: $170 million
Mortgages: $650 million—privately held
Cash and short-term securities: $10 million
Percent of fund internally managed: 100%

TEACHER RETIREMENT SYSTEM OF TEXAS

1001 Trinity St.
Austin, TX 78701
Contact: Joe W. Perrone, Chief Investment Officer, (512) 397-6460

Information current as of 3/31/89

Total assets: $18.3 billion
Common and preferred stock: $5.9 billion
U.S. government securities and agencies: $4.4 billion
Corporate bonds: $2.6 billion
Mortgages: $200 million—privately held; $3.1 billion—government backed
Other real estate: $1.8 billion
Cash and short-term securities: $300 million
Percent of fund internally managed: 100%
Investment advisors: Wellington Management Co.; L.J. Melody Co.; Lomas & Nettleton; Alex Brown; Boston Co.; FIA

UTAH STATE RETIREMENT FUND

540 East, 200 South
Salt Lake City, UT 84102

Contact: W. Dan Smith, Investment Officer, (801) 355-3884

Information current as of: 2/28/89

Total assets: $3.4 billion
Common and preferred stock: $1.6 billion
U.S. government securities and agencies: $757 million
Corporate bonds: $225 million
Mortgages: $40 million—privately held; $160 million—government backed
Other real estate: $302 million
Cash and short-term securities: $300 million
Other investments: $79 million
Percent of fund internally managed: 60%
Discretionary investment advisors: State Street Bank; Dimensional Fund; Baring International; Atalanta/Sosonoff; Smoot Miller Cheney; Wasatch

VERMONT STATE RETIREMENT SYSTEM

133 State St.
Montpelier, VT 05602
Contact: George Bruce, Director of Retirement, (802) 828-2305

Information current as of 3/1/89

Total assets: $287 million
Common and preferred stock: $135 million
U.S. government securities and agencies: $2 million
Corporate bonds: $98 million
Mortgages: $2 million—privately held
Other real estate: $8 million
Cash and short-term securities: $28 million
Other investments: $12 million, GICs
Percent of fund internally managed: 5%
Discretionary investment managers: Delaware Investment Advisers; Loomis Sayles & Co.; Brundage, Story & Rose

WASHINGTON STATE DEPARTMENT OF RETIREMENT SYSTEMS

1025 East Union Ave.
Olympia, WA 98504
Contact: Judy Bushell, Accountant, (206) 586-2830

Information current as of 4/30/89

Total assets: $11 billion
U.S. government securities and agencies: $2 billion
Corporate bonds: $587 million
Mortgages: $131 million—privately held; $587 million—government backed
Cash and short-term securities: $425 million
Other investments: $8 billion—CTFs
Percent of fund internally managed: 65%
Discretionary investment manager: Wells Fargo Bank; Mellon Capital Management Corp.; Frank Russell Co.
Investment advisors: Wells Fargo Bank; Mellon Capital Management Corp.; Frank Russell Co.

STATE OF WEST VIRGINIA RETIREMENT SYSTEMS

Room E-120 State Capitol Building
Charleston, WV 25305
Contact: Mary O. Hudson, Assistant Treasurer for Investments, (304) 346-9100

Information current as of 3/31/89

Total assets: $2.2 billion
U.S. government securities and agencies: $1.3 billion
Corporate bonds: $386 million
Mortgages: $81.1 million—privately held; $283 million—government backed
Cash and short-term securities: $173 million
Investment advisors: Investment Advisors Inc.; Duff & Phelps; Charleston National Bank

STATE OF WISCONSIN INVESTMENT BOARD

121 E. Wilson St.
P.O. Box 7842
Madison, WI 53707
Contact: Marshall Burkes, Executive Director, (608) 266-2381

Information current as of 6/30/88

Total assets: $18.2 billion
Common and preferred stock: $7.4 billion
U.S. government securities and agencies: $7.8 billion
Mortgages: $153 million
Other real estate: $344 million
Cash and short-term securities: $2.6 billion
Percent of fund internally managed: 100%

WYOMING RETIREMENT SYSTEM

First Floor, Herschler Building
Cheyenne, WY 82001
Contact: Terry Hanley, Director, (307) 777-7691

Information current as of 12/31/88; all figures at market value

Total assets: $1.2 billion
Common and preferred stock: $310 million
U.S. government securities and agencies: $192 million
Corporate bonds: $199 million
Mortgages: $431 million—government backed
Cash and short-term securities: $89 million
Discretionary investment managers: Dreman Value; Alliance Capital Management Co.; Trinity Asset Management; Bear Stearns; Lehman Management; Wyoming National Bank-Casper

The First NEW forms service since TRA '86 and TAMRA!

Pension & Profit Sharing Forms

From Prentice Hall Law & Business/DOCUPREP

The only forms service with detailed explanation and the statutory basis for each clause you choose.

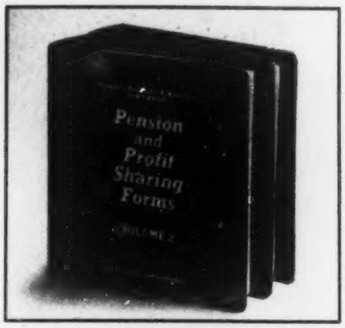
Through DOCUPREP, Inc. you also have the option of having custom forms prepared.

Three years in development, this new two-volume ***Pension and Profit Sharing Forms*** service will simplify the amendment of your Plan, to meet the provisions of TRA '86 and TAMRA.

Pension and Profit Sharing Forms provides a comprehensive guide for all types of Plans:

- ***Profit Sharing Plan***
- ***401 (k) Cash or Deferred Plan***
- ***Defined Benefit Pension Plan***
- ***Money Purchase Pension Plan***
- ***Target Benefit Pension Plan***

The forms service is cross referenced to other Prentice Hall Information Services pension publications.



☐ Please send me additional information on your new ***Pension and Profit Sharing Forms*** service.

Name ____________
Title ____________
Company ____________
Address ____________
City ____________
State ____________
Zip ____________
Phone ____________

Mail to: Wendy Gesslein, **Prentice Hall Information Services,** 235 Frisch Court, Paramus, N.J. 07652
Or call **TOLL FREE 1-800-872-6386**

PHIS-PW8/89

State Employee Health Plan Costs Rise 20%

For many insured plans, recent rate increases reflect the attempts by insurers to recoup previous losses and return to profitability.

BY JOHN P. MACKIN, Senior Vice President
Martin E. Segal Co., New York

The average cost of state employee health benefit plans increased about 20 percent during the year ended January 1989. More than one-fourth of the state plans reported cost increases in excess of 30 percent, and in six states the cost of the basic indemnity plan jumped by more than 40 percent.

State health benefit plans have experienced sharp cost increases for two consecutive years. The major factors contributing to the rising costs of state and all other health plans include renewed medical inflation, hospital cost shifting, advances in medical technology and treatment, and changing utilization patterns. For many insured plans, recent rate increases also reflect the attempts by insurers to recoup previous losses and return to profitability. In some states, changing plan demographics have fueled the rise in health plan costs.

The principal findings of Martin E. Segal Co.'s 1989 and 1988 surveys of state health benefit plans contrast sharply with the findings of the firm's 1987 and 1986 annual surveys. Although averages conceal the very wide diversity in state plan benefits and costs, in 1989 and 1988 the average total cost for the 50 state plans increased by substantially more than the medical component of the Consumer Price Index, (see Chart 1).

In early 1989, the Segal Co. surveyed the 50 state plans to obtain current information on plan participants and monthly contributions. The survey covers plan participants and HMO participation as of January 1989, and contributions to each of the 50 state plans for January 1989 and January 1988 for employee only coverage, employee and family coverage, and retiree only coverage.

The contribution data summarized is for basic indemnity plans. Figures regarding average costs for the 50 state plans and the distribution of plans by the percentage of the total cost paid by the state are based on the low option indemnity plan for states with multiple benefit plans.

As of January 1989, the 50 state health benefit plans covered more than four million active employees and retirees. The figures shown in Table A total 3,192,900 covered employees and 827,100 covered retirees. For California and New York, however, the figures shown are for state employees and retirees only, and exclude the thousands of local government employees covered by these two state-administered plans.

HMO participation varies widely among the 50 states, as shown in the right-hand portion of Table A. The number of HMOs offered ranges from zero in six states to 10 or more in 13 states. States that offer more than 25 HMOs include California, New York, Ohio and Wisconsin.

In January 1989, the 50 state plans offered a total of 398 HMOs, compared to a total of 445 a year earlier. States that reduced the number of HMOs offered and experienced decreases in the percentage of employees covered by HMOs include Colorado, Florida, Illinois, Michigan, Ohio and South Carolina. On the other hand, a few states added HMOs and covered employees, including California, Tennessee and Texas.

Approximately one million or 32 percent of the 3.2 million employees covered by the 50 state plans were enrolled in HMOs as of January 1989. The percentage of employees enrolled in HMOs

John P. Mackin, Ph.D., is a senior vice president with New York-based Martin E. Segal Co., an international consulting firm.

varies dramatically—from less than 10 percent in 14 states to more than 50 percent in seven states.

Almost three-fifths of the states (29 of the 50) currently pay 100 percent of the cost for employee only coverage under the basic indemnity plan. During the year ended January 1989, the number of states that pay the full cost for employees decreased from 31 to 29 and the number that pay less than 70 percent increased from three to five states.

From January 1988 to January 1989, the total cost for employee only coverage increased in 41 states, remained the same in eight states, and decreased slightly in one state. Percentage increases in the total cost for single coverage ranged from less than 10 percent in seven states to more than 30 percent in 14 states. Six states—Arizona, Minnesota, New Mexico, Vermont, Washington and Wisconsin—experienced cost increases for employee only coverage in excess of 40 percent.

The average total cost for employee only coverage increased to $111.89 for January 1989 from $93.11 for January 1988. Although the percentage changes in individual plan costs varied substantially, the 20.2 percent increase in the average total cost for employee only coverage was almost triple the 7 percent rise in national medical care costs as measured by the CPI.

Slightly less than one-fourth of the states (12 of the 50) pay for the full cost of health benefits for employees and their dependents. Between 1988 and 1989 the distribution of plans by the state's share of the total cost for employee and family coverage changed (see Chart 3).

As of January 1989, 27 states were paying less than 80 percent of the total cost for employee and family coverage under the basic indemnity plan. In 10 of these 27 states, the state's share was less than half the total cost for family coverage.

From January 1988 to January 1989, the total cost for employee and family coverage increased in 42 states, remained the same in seven states, and decreased in one state. Percentage increases ranged from less than 10 percent in seven states to more than 30 percent in 15 states. Six states—Arizona, Indiana, Kansas, Minnesota, Vermont and Washington—experienced increases of more than 40 percent in the total cost for family coverage.

Among the 38 state plans where employees contribute for employee and family coverage, the average employee cost was $88.55 for January 1989 (or 17.9 percent higher than the average employee cost of $75.09 for January 1988). In 14 of the 38 states, the employee's out-of-pocket cost for family coverage exceeds $100 a month.

For the 50 state plans, the average total cost for family coverage increased 20.8 percent to $256.66 for January 1989 from $212.45 for January 1988. The percentage

TABLE A

PARTICIPANTS IN STATE EMPLOYEE HEALTH BENEFIT PLANS AS OF JANUARY 1989

STATE	EMPLOYEES COVERED BY PLAN [a]	RETIREES COVERED BY PLAN [b]	HMO PARTICIPATION		
			NUMBER OF HMOs OFFERED	EMPLOYEES ENROLLED IN HMOs	
				NUMBER	PERCENT
ALABAMA	33,300	7,000	1	3,400	10
ALASKA	12,500	9,900	0	0	0
ARIZONA	41,100	1,800	4	23,700	58
ARKANSAS	18,100	3,500	0	0	0
CALIFORNIA [c]	210,800	79,300	28	175,900	83
COLORADO	22,700	[d]	2	11,000	48
CONNECTICUT	56,000	17,000	9	11,900	21
DELAWARE	26,000	9,000	2	7,000	27
FLORIDA	106,500	12,400	19	28,700	27
GEORGIA	161,000	33,000	4	13,000	8
HAWAII	36,800	20,800	3	11,100	30
IDAHO	14,500	2,100	2	1,300	9
ILLINOIS	118,600	45,700	17	58,100	49
INDIANA	33,800	0	6	15,400	46
IOWA	28,100	3,100	7	4,500	16
KANSAS	35,500	7,200	5	13,200	37
KENTUCKY	113,000	19,700	8	53,000	47
LOUISIANA	71,100	25,300	6	30,400	43
MAINE	15,800	6,600	0	0	0
MARYLAND	66,000	18,000	10	24,700	37
MASSACHUSETTS	95,600	34,800	18	62,100	65
MICHIGAN	59,600	22,400	18	23,000	39
MINNESOTA	52,900	8,300	8	29,100	55
MISSISSIPPI	44,000	3,500	0	0	0
MISSOURI	36,800	5,300	7	8,500	23
MONTANA	10,200	1,800	0	0	0
NEBRASKA	13,000	100	4	4,000	31
NEVADA	17,500	2,000	1	4,500	26
NEW HAMPSHIRE	10,000	4,800	3	800	8
NEW JERSEY	249,700	54,100	20	72,500	29
NEW MEXICO	17,000	2,100	1	7,000	41
NEW YORK [c]	241,000	79,100	27	66,300	28
NORTH CAROLINA	214,600	63,000	2	17,200	8
NORTH DAKOTA	13,000	1,700	3	1,200	9
OHIO	52,800	[d]	28	32,200	61
OKLAHOMA	43,700	26,500	4	10,400	24
OREGON	26,000	2,500	7	10,000	38
— BUBB PLAN	17,000	2,000	5	4,000	24
PENNSYLVANIA	86,600	45,900	22	12,400	14
RHODE ISLAND	18,400	12,900	4	5,000	27
SOUTH CAROLINA	131,400	31,700	2	10,200	8
SOUTH DAKOTA	12,100	1,500	0	0	0
TENNESSEE	58,800	2,600	9	7,900	13
TEXAS	119,600	24,500	23	50,500	42
UTAH	12,400	3,900	2	2,300	19
VERMONT	6,400	1,800	1	800	13
VIRGINIA	92,600	15,000	4	8,800	10
WASHINGTON	74,000	15,500	10	43,500	59
WEST VIRGINIA	81,300	20,100	3	2,200	3
WISCONSIN	53,600	14,300	26	44,500	83
WYOMING	10,100	2,000	1	300	3

---

[a] Approximate total number or covered employees, including employees enrolled in HMOs.

[b] Approximate total number of covered retirees.

[c] Participants shown are state employees and retirees only (i.e., figures exclude local employees and retirees).

[d] Retired state employees are covered by a separate health benefit plan for all retired members of the state public employees retirement system.

rise in the average total cost for family coverage was substantially higher than in the three previous years.

States are concentrated at the opposite ends of the spectrum in terms of the state's share of the total cost for retiree only coverage. Currently, 20 states make no contributions toward the cost of retiree health care benefits, while 20 pay for the full cost of coverage for some or all single retirees age 65 or over with Medicare (see Chart 4).

Among the 48 state plans that make access to coverage available to retirees, the average cost of coverage for a single retiree 65 or over with Medicare was $72.81 for January 1989; or 18.0 percent higher than the $61.68 average for January 1988.

During the year ended January 1989, two states that previously made no contributions began contributing toward the cost of retiree health benefits. Oklahoma now pays 100 percent, and Tennessee contributes about 38 percent of the cost for single retirees with 30 or more years of service. Other states that increased their share of the cost include Connecticut (80 percent-100 percent) and Delaware (91 percent-100 percent).

Five states relate their payment toward the cost of retiree health coverage to years of service, as follows:

- Colorado Retirement System pays $4.75/month per year of service to $95/month for 20 or more years.
- Florida Retirement System pays up to $2/month per year of service to $60/month for 30 or more years.
- Kentucky Retirement System pays a percentage of the total cost based on years of service: 25 percent for four-nine years, 50 percent for 10-14 years, 75 percent for 15-19 years, and 100 percent for 20 or more years.
- New Jersey pays 100 percent for retirees with 25 or more years of service and for disability pensioners; retirees with less than 25 years pay the full cost.
- Tennessee pays $7/month for retirees with 15-19 years of service, $10.50/month for 20-29 years, and $14/month for 30 or more years.

In many states, the growing number of politically effective retired public employees will continue to lobby for legislation providing for payment by the state of a larger portion of the cost of their health care coverage. Some states may increase their share of total costs for retirees, and a growing number will relate their share of total plan costs to the retiree's years of service.

Several states have authorized studies of the actuarial liabilities and funding costs for retiree health benefits. How-

CHART 1

Percentage Increase (Jan. to Jan.)

		Average Total Cost-50 State Plans		
Year Ended January	CPI Medical Care Component	Employee Only	Employee & Family	Retiree Over 65
1989	7.0%	20.2%	20.8%	18.0%
1988	6.2	14.1	12.8	11.3
1987	7.5	5.3	4.8	4.6
1986	6.9	3.5	2.8	1.7

CHART 2

	Number of State Plans	
State's Share of Total Cost for Employee Only Coverage	1988	1989
100%	31	29
90% - 99%	7	8
80% - 89%	4	5
70% - 79%	5	3
Less than 70%	3	5

CHART 3

	Number of State Plans	
State's Share of Total Cost for Employee and Family Coverage	1988	1989
100%	12	12
90% - 99%	4	3
80% - 89%	7	8
70% - 79%	8	7
60% - 69%	3	3
50% - 59%	7	7
40% - 49%	6	7
Less than 40%	4	3

CHART 4

	Number of State Plans	
State's Share of Total Cost for Single Retiree Age 65 or Over	1988	1989
100%	16*	20*
90% - 99%	3	3
80% - 89%	3	2
70% - 79%	1	—
50%	1	1
10% - 49%	2	4
0%	24**	20**

* Includes states that pay 100% only for retirees with many years of service.
** Includes Indiana and Nebraska, which do not cover retirees 65 and over under their state health benefit plans.

CHART 5

Paying For Medicare's Catastrophic Coverage

		Income Tax Surcharge		
Year	Additional Part B Monthly Premium	Per $150 of income tax liability	Percent of income tax	Maximum per individual/couple
1989	$ 4.00	$22.50	15%	$ 800/$1,600
1990	$ 4.90	$37.50	25%	$ 850/$1,700
1991	$ 7.36	$39.00	26%	$ 900/$1,800
1992	$ 9.20	$40.50	27%	$ 950/$1,900
1993	$10.20	$42.00	28%	$1,050/$2,100

ever, only a couple of states are currently funding retiree health care benefits on an actuarial reserve basis during the employees' working years.

The Medicare Catastrophic Protection Act of 1988 necessitates a comprehensive review and redesign of retiree health benefit plans. The expanded and new Medicare benefits will be financed by an additional Part B monthly premium, and by a federal income tax surcharge for Medicare-eligible individuals (see Chart 5).

For 1989, the total Part B monthly premium is $31.90, consisting of a basic premium of $27.90 and an additional $4 for catastrophic coverage. Since 1987 the Part B premium has increased by more than 75 percent—from $17.90 in 1987 to $24.80 in 1988, and to $31.90 for 1989. By 1993 the total Part B premium may exceed $50 a month.

Seven states—California, Connecticut, Hawaii, Massachusetts, New Jersey, New York and Ohio—currently pay all or a portion of the Medicare Part B premium for some or all retirees 65 and over. As the additional Part B premium and income tax surcharge for catastrophic coverage increase in each of the next four years, retired public employees may seek relief in the form of reimbursement for part or all of the Part B premiums or larger post-retirement benefit increases for over-65 retirees. When states consider the various options for revising retiree health benefits packages, some may decide to begin paying all or part of the Medicare Part B premiums.

The Medicare Catastrophic Protection Act provides states and other health plan sponsors with an opportunity to reevaluate retiree health benefits. The expansion of benefits and addition of prescription drug coverage provides Medicare beneficiaries with more extensive health coverage, yet still does not cover some important, and expensive, health care services.

If states had not implemented a wide variety of cost management initiatives, the average cost of health plans covering state employees may have increased by considerably more than 20 percent during the year ended January 1989.

Cost management measures implemented by state plans include: precertification and preadmission review programs; managed care programs; individual case management; hospital length of stay assignments, concurrent review and discharge planning; second surgical opinion programs; incentives for outpatient surgery and for diagnostic and preadmission tests performed on an outpatient basis; limitations on benefits for weekend admissions; audits of hospital and doctor bills; home health care benefits; hospice benefits; wellness benefits and incentives for healthier lifestyles.

Among state health plans, a major development in the area of cost management is the introduction of precertification programs. Roughly half the state plans have instituted some type of precertification or preadmissioin review program.

Also, a growing number of state plans are implementing managed care and large case management programs. State plans that started managed care programs during the past year include Connecticut, Maine, Massachusetts and New Hampshire. Case management programs recently have been implemented by the state plans in Georgia, Illinois, Missouri, Montana, South Carolina and South Dakota.

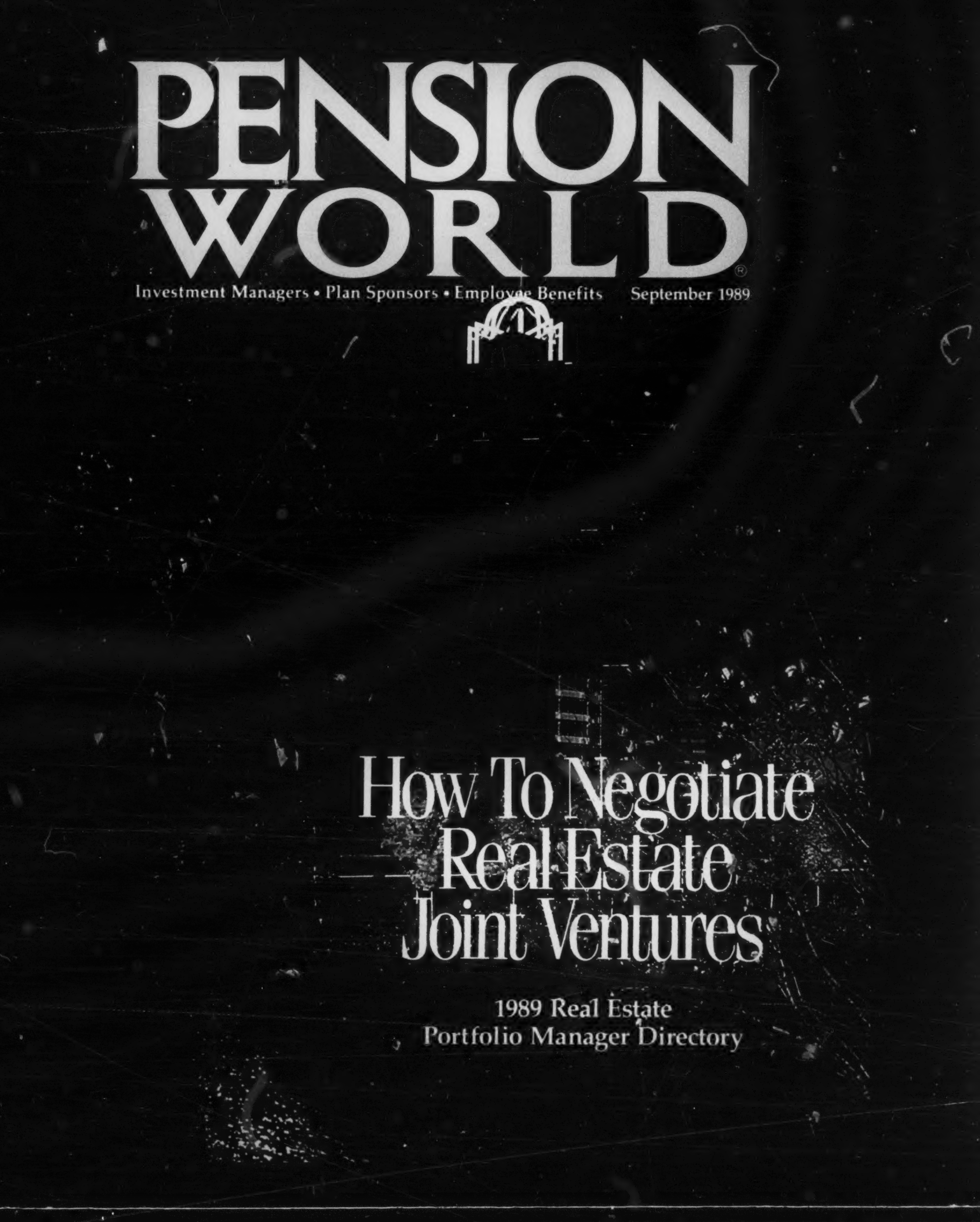
PPOs have been established by about two-fifths of the state plans.

PPOs, or preferred provider arrangements, have been established by about two-fifths of the state employee health benefit plans. Recent developments include the addition of PPO networks in Illinois, Maryland and Michigan; changes in PPO coverages and incentives in Florida and Oregon; and the negotiation of hospital discounts with a substantial majority of the providers to employees covered by the Kentucky plan.

A few state plans, including the North Dakota and South Carolina plans, have negotiated discounts for prescription drugs or implemented preferred pharmacy programs. Several additional state plans recently have established mail order drug programs or modified copay provisions to encourage the use of generic drugs.

To a much greater extent in the future, state health benefit plans will be designed to influence choices about care and providers. In addition, there is likely to be a greater recognition of the importance of communications as a vehicle to encourage covered employees and retirees to become more cost conscious consumers of health care. The experience of state plans indicates that well-designed cost management initiatives can influence providers and make the health care system more cost effective. ☐

Editor's Note: The complete survey report, including tables showing contributions to each of the 50 state employee health benefit plans for January 1989 and January 1988 for employee only coverage, employee and family coverage, and retiree only coverage, may be obtained from Dr. John P. Mackin, Senior Vice President, Martin E. Segal Co., 730 Fifth Ave., New York, N.Y. 10019.



PENSION WORLD®

Investment Managers • Plan Sponsors • Employee Benefits September 1989

How To Negotiate Real Estate Joint Ventures

1989 Real Estate
Portfolio Manager Directory

Investment Managers
• Plan Sponsors •
Employee Benefits
A Publication Of
Communication Channels, Inc.

PENSION WORLD

September 1989
Volume 25 Number 9

About The Cover: The Concourse, a 65-acre mixed-use development by The Landmarks Group in Atlanta, Ga., is shown with the recently completed 31-story office tower. Our cover story on joint ventures begins on page 30.
Photograph by Gordon Kilgore.

COLUMNS

Insights	8
New York Update	12
Washington Update	14
Benefits	60
Plan Design	62
Investments	64
Guest Viewpoint	66

DEPARTMENTS

Editor's Notes	4
Letters	6
World News	54
News Briefs	56
Executive Suite	57
Calendar	59

INVESTMENTS

Survey Analyzes Maturing GICs 16
By Susan R. Jenson
Issuers do not project the steady upward progression of maturing contract values that might be expected.

Active Asset Allocation Strategies Can Pay Dividends 20
By William Breen
There are two sets of circumstances, however, in which a plan has no need to rebalance its asset allocation.

How To Design Participant-Directed Benefit Plans 24
By Ken Robertson
Rank-and-file employees have become more investment wise and want services that are available to individual investors.

How To Negotiate Real Estate Joint Ventures 30
By Paul Fruchbom
Pension funds have predominated in participating debt financing and in providing various types of guarantees.

Regional Real Estate Investment Focuses On Specialization 36
By T. Robert Burke
This technique can supplement a core portfolio by filling niches that have been neglected or overlooked.

1989 Real Estate Portfolio Manager Directory 38
PENSION WORLD Exclusive Survey
This directory outlines the practices and methods used by firms in making real estate investments for pension fund clients.

EMPLOYEE BENEFITS

Dying With Their Boots On 48
By Peter A. Christensen
The financial climate of the 1980s has been especially favorable to the implementation of defined-contribution plans.

PENSION WORLD (ISSN #0098-1753) is published monthly by Communication Channels, Inc., Jerrold France, President; Lawrence Moores, Executive Vice President; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *PENSION WORLD* is a registered trademark of Communication Channels, Inc. © 1989 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates: U.S., 1 year, $50; 2 years, $79; Outside U.S.A. (Surface Mail), 1 year, $70; Overseas Air Mail, $120. Single copies, $6. Group rates available. Directory copies: *PENSION WORLD* State Retirement Systems Survey (August), $9.95; *PENSION WORLD* Real Estate Portfolio Managers Directory (September), $9.95; *PENSION WORLD* Directory of Master and Directed Trust Services (December), $9.95; *PENSION WORLD* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *PENSION WORLD* are not necessarily those of the editors or publisher. Articles appearing in *PENSION WORLD* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *PENSION WORLD* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *PENSION WORLD*, 6255 Barfield Road, Atlanta, GA 30328.

1989 PENSION WORLD Real Estate Portfolio Manager Directory

This directory outlines the practices and methods used by firms in making real estate investments on behalf of their pension fund clients.

The information contained in the 1989 Real Estate Portfolio Manager Directory was compiled by Barbara Katinsky, managing editor of the directory department, and Lisa Wofford, listings editor.

The 1989 Real Estate Portfolio Manager Directory, compiled by the directory department of PENSION WORLD, provides information on companies that invest in real estate on behalf of pension funds.

This year's directory reports on the real estate investment practices of 102 firms. These 102 firms have pension fund real estate assets of more than $114.5 billion. The magazine mailed questionnaires to 247 companies involved with real estate investment in April, giving the survey a 41 percent rate of return. Last year's directory contained information from 96 firms.

The directory's listings, which are arranged in alphabetical order, include the name of the firm and the firm's address, along with a contact person and telephone number. Additionally, each entry includes the responding firm's total assets under real estate portfolio management, real estate assets managed for pension funds and the number of pension fund clients served by the companies.

Some companies manage real estate assets exclusively for pension fund clients, while other companies serve additional clients. Also, some firms, particularly the insurance companies, have real estate holdings for their own accounts.

In responding to the questionnaire, companies were asked to provide breakdowns of their holdings by property type, participation offered (pooled funds, separate accounts, etc.) and geographic diversification.

The directory also includes each respondent's minimum investment requirement, return on investment and fees. Except where otherwise noted, returns on investment are net of fees. For comparison purposes, respondents were asked to provide cumulative returns as well as the latest annual return.

Because of differences among managers in computing rates of return, a comparison of returns from firm to firm may not be valid. Unless otherwise indicated, all information is current as of Dec. 31, 1988.

The following listings are based on the information provided by the individual companies, on behalf of their clients, to the directory department of PENSION WORLD. While the magazine has attempted to prepare this information as carefully as possible, PENSION WORLD assumes no responsibility for the accuracy of the information presented in the individual listings.

ACQUEST CAPITAL MANAGEMENT INC.
300 E. Long Lake Road, Suite 355
Bloomfield Hills, MI 48013
Contact: Delores M. Hoenes, Acq. Mgr., (313) 645-5130

Total real estate portfolio assets: $159.2 million
Total pension fund real estate assets: $129.9 million
Pension fund real estate clients: 8
Asset breakdown: 28.9% office, 4% retail, 12.7% hotel, 19.6% residential, 6.4% land, 28.4% commingled funds
Participation offered: Participation in cash flow; participation in reversion
Geographic diversification: Michigan, Ohio, Colorado, Texas
Minimum investment: $1 million
Return on investment: Not available
Fee: Not available

AETNA LIFE INSURANCE CO.
151 Farmington Ave.- MB64
Hartford, CT 06156
Contact: Patricia R. Bowerman, Mgr., (203) 275-2547

Total real estate portfolio assets: $27.1 million
Total pension fund real estate assets: $20.5 million
Pension fund real estate clients: 420
Asset breakdown: 33.5% office, 12.6% industrial, 19.9% retail, 3.9% hotel, 21.5% residential, .8% land, 7.8% other-R&D
Participation offered: Commingled open and closed-end separate accounts; commingled closed-end specialty separate accounts; commingled open and closed-end limited partnerships; individually managed (single property, single depositor) separate accounts
Geographic diversification: National
Minimum investment: Commingled open-end accounts, no minimum; commingled closed-end, $500,000; individual accounts, equity real estate, $100 million but smaller accounts considered, e.g., an initial deposit of $25 million; residential mortgage, $10 million minimum.
Return on investment: Varies by account; latest annual - 9.3% for open-end accounts; 10% for closed-end accounts; 14.2% for individual accounts
Fee: Annual management fee varies by account, e.g., 1% of net asset value; participating mortgages, .75% of net asset value; specialty (one property-type) accounts on a component basis, i.e, acquisition fee, management fee and disposition fee

ALDRICH, EASTMAN & WALTCH INC.
265 Franklin St.
Boston, MA 02110
Contact: Robert J. Hannan, VP, (617) 439-9000

Total real estate portfolio assets: $3.9 billion
Total pension fund real estate assets: $3.7 billion
Pension fund real estate clients: 57 (includes participants in commingled funds and separate account relationships)
Asset breakdown: 34% office, 13% industrial, 35% retail, 1% hotel, 5% residential, 12% other
Participation offered: Closed-end commingled funds, separate accounts
Geographic diversification: National
Minimum investment: Commingled funds - $5 million, separately managed accounts - $100 million
Return on investment: Cumulative - 14.9% six years ending 12/31/88; latest annual - 12.3%
Fee: Separately negotiated for each fund/separate account

AMERICAN AGRICULTURAL INVESTMENT MANAGEMENT CO. INC.
631 E. Butterfield Road, Suite 302
Lombard, IL 60148
Contact: Paula M. Tomsky, Farm Analyst/Marketing, (312) 810-0370 or 0040

Total real estate portfolio assets: $21.6 million
Total pension fund real estate assets: $13 million
Pension fund real estate clients: 2
Asset breakdown: 100% agricultural
Participation offered: Closed-end funds, separate accounts
Geographic diversification: West, Southwest, Midwest, South, Midsouth
Minimum investment: $1 million
Return on investment: Cumulative - 9% 2 years; latest annual - 5.5%
Fee: 1.2% per annum beginning Jan. 1, 1990 for most recent offering, Heartland Group Trust IV. There are no additional fees

AM CAL ADVISORS INC.
4730 Woodman Ave., #220
Sherman Oaks, CA 91423-2485
Contact: James B. McKenna, Pres., (818) 990-3250

Total real estate portfolio assets: $85 million
Total pension fund real estate assets: $85 million
Pension fund real estate clients: 8
Asset breakdown: 30% office, 20% industrial, 30% retail, 20% residential
Participation offered: Separate accounts; group trust - equity fund, group trust - mortgage fund
Geographic diversification: National
Minimum investment: $500,000 - group trust
Return on investment: Cumulative - 9.9%, 1986-1988; latest annual - 9.2%
Fee: 1% of assets under management

ANGELES INSTITUTIONAL ADVISORS INC.
10301 West Pico Boulevard
Los Angeles, CA 90064
Contact: J. William Baker, Pres. & CEO, (800) 421-4374

Total real estate portfolio assets: $1.1 billion
Total pension fund real estate assets: $64.5 million
Pension fund real estate clients: 78
Asset breakdown: 23.1% office, 4.4% industrial, 15% retail, 1.3% hotel, 55.3% residential, .4% land, .5% other-warehouse
Participation offered: Closed-end and separate accounts
Geographic diversification: 23.3% East, 13.1% West, 20.6% Midwest, 40% South, 3% Canada
Minimum investment: $5 million
Return on investment: Cumulative - income 7.8%, appreciation 3.4%, total return - 11.2%
Fee: .75% of net asset value, plus incentive fee of 10% of excess above a 5% real rate of return

ASB CAPITAL MANAGEMENT INC.
655 15th St., N.W.
Suite 900
Washington, DC 20005
Contact: Philip St. G. Cocke, VP/Dir of Mktg., (202) 383-6395

Total real estate portfolio assets: Not available
Total pension fund real estate assets: $506.3 million
Pension fund real estate clients: 15
Asset breakdown: 73% office, 13% industrial, 6% retail, 6% residential, 2% land
Participation offered: Separate accounts and open-end funds
Geographic diversification: 43% East, 6% South, 13% Midwest, 38% West
Minimum investment: $1 million
Return on investment: Cumulative - not available; latest annual - 7.7% commingled, 6.5% separate accounts
Fee: Commingled fund 1.25% on market value of participant's account. Separate accounts 1.25% of first $25 million, 1% of next $25 million, .75% of next $50 million, .50% thereafter

BANK OF BOSTON
Real Estate Division
P.O. Box 2016, H0-32-03
Boston, MA 02106-2016
Contact: William V. Tanski Jr., Vice Pres./Dir. of Mktg.; (617) 434-7346

Total real estate portfolio assets: $243 million
Total pension fund real estate assets: $209 million
Pension fund real estate clients: 132
Asset breakdown: 47% office; 14% industrial; 30% retail; 9% residential
Participation offered: Separate accounts, open-end commingled fund (began liquidating as of 3/31/89)
Geographic diversification: National
Minimum investment: None
Fee: Annual fee is 1%, charged .25% quarterly

BATTERYMARCH: AGRIVEST
500 Winding Brook Drive
Glastonbury, CT 06033
Contact: James B. McCandless, Exec. VP, (203) 659-3711

Total real estate portfolio assets: $320 million
Total pension fund real estate assets: 0
Pension fund real estate clients: Currently offering services to various pension fund clients
Asset breakdown: 100% agricultural
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $5 million
Return on investment: Not available
Fee: Negotiated on a case basis

BENNETT AND KAHNWEILER REALTY ADVISORS
9700 W. Bryn Mawr Ave.
Rosemont, IL 60018
Contact: James S. Lee, VP/Dir. of Acq., (312) 671-7911

Total real estate portfolio assets: $300 million
Total pension fund real estate assets: $300 million
Pension fund real estate clients: 2
Asset breakdown: 43% office, 33% industrial, 22% retail, 2% residential
Participation offered: Separate accounts
Geographic diversification: Emphasis on Midwest
Minimum investment: $25 million
Return on investment: Cumulative - 13% from 9/30/86 to 3/31/89; latest annual - 13.4%
Fee: Negotiate fixed-rate or performance-based fees, depending on the client's preference

BOATMEN'S TRUST CO.
510 Locust St.
St. Louis, MO 63101
Contact: Richard W. Hibbs, Sr. VP, (314) 436-9265

Total real estate portfolio assets: $146.2 million
Total pension fund real estate assets: $15 million
Pension fund real estate clients: 38
Asset breakdown: Not available
Participation offered: Open-end equity
Geographic diversification: National
Minimum investment: $100,000, except 401(k) participants.
Return on investment: Cumulative - 9.7%; latest annual - 13.2% (as of 12/31/88)
Fee: 1% of market value less funds invested in short-term instrument fund

THE BOSTON COMPANY REAL ESTATE COUNSEL INC.
One Boston Place-OB18B
Boston, MA 02106
Contact: Thomas N. Trkla, VP, (617) 722-7116

Total real estate portfolio assets: $2.4 billion
Total pension fund real estate assets: $2.4 billion
Pension fund real estate clients: 15
Asset breakdown: 61.6% office, 12% industrial, 19.1% retail, 7.3% residential
Participation offered: Separate accounts and specialty closed-end funds
Geographic diversification: National
Minimum investment: $10 million
Return on investment: Cumulative - 15.3% (11/82-12/31/88); latest annual - 11.9%
Fee: Do not have a single, standardized fee structure and, as a matter of policy, the firm is flexible in the structuring of its fee arrangement

ALEX. BROWN REALTY ADVISORS INC.
2 N. Charles St.
Baltimore, MD 21201
Contact: Mahlon Apgar IV, Director, (301) 783-3200

Total real estate portfolio assets: $1.1 billion
Total pension fund real estate assets: $1.1 billion
Pension fund real estate clients: 7
Asset breakdown: 57% office, 4% industrial, 21% retail, 13% hotel, 3% residential, 2% other
Participation offered: Closed-end funds, separate accounts, real estate securities and private placements
Geographic diversification: 25% East, 25% West, 35% South, 14% Midwest, 1% Canada
Minimum investment: $2 million
Return on investment: Cumulative - 13.6% (81-88); latest annual - 8.8%
Fee: Separate accounts, by arrangement; closed-end funds: .6% for 1 year (of cost), .9% for 2-10 years (of cost), 5% of cash flow

CABOT, CABOT & FORBES REALTY ADVISORS INC.
60 State St.
Boston, MA 02109
Contact: Robert M. Angland, Exec. VP, (617) 722-8200

Total real estate portfolio assets: $830 million
Total pension fund real estate assets: $830 million
Pension fund real estate clients: 9
Asset breakdown: 35% office, 65% industrial
Participation offered: Separate accounts
Geographical diversification: National
Minimum investment: $100 million
Fee: Varies

CAMBRIDGE REALTY CAPITAL LTD.
200 W. Superior Street, Suite 303
Chicago, IL 60610
Contact: Jeffrey N. Frankel, VP, (312) 943-1911

Total real estate portfolio assets: $40 million
Total pension fund real estate assets: 0
Pension fund real estate clients: 2
Asset breakdown: 20% office, 80% industrial
Geographic diversification: Chicago
Minimum investment: $5 million
Return on investment: Cumulative - 12%; latest annual - still holding, new property
Fee: 1%

CANADA LIFE
65 Queen St. W., Suite 1401
Toronto, Ontario, Canada, L1H 5Z2
Contact: Joe Killoran, Pension Investment Consultant, (416) 571-6048

Total real estate portfolio assets: $1 billion
Total pension fund real estate assets: $210.9 million
Pension fund real estate clients: 190
Asset breakdown: 27% office, 23% industrial, 45.3% retail/shopping centers, 6% other - under development
Participation offered: Open-end pooled fund
Geographic diversification: 30% British Columbia, 14% Alberta, 51% Ontario, 1% Quebec, 4% Atlantic Province
Minimum investment: 0
Return on investment: Cumulative - 13.3% 5 year return; latest annual - 13%
Fee: 1% before unit value calculation; .75% on first million, .4% on next $4 million, .25% on excess

CAPITAL CONSULTANTS INC.
2300 S.W. First Ave.
Portland, OR 97201
Contact: Karen Blomquist, VP-Real Estate, (503) 228-4552

Total real estate portfolio assets: $236.4 million
Total pension fund real estate assets: $236.4 million
Pension fund real estate clients: 33
Asset breakdown: 42.3% office, 5.7% industrial, 13.4% retail, 31.2% residential, 7.4% timber
Participation offered: Separate accounts
Geographical diversification: West, South
Minimum investment: $500,000
Return on investment: Cumulative - 11.6%; 6 years, latest annual - 12.9%
Fee: Mortgages, 1% real estate asset management fee on market value of assets. 1.5% one-time acquisition fee on participating second mortgages only

CIGNA ASSET ADVISERS INC.
950 Cottage Grove Road
Hartford, CT 06152
Contact: William E. Chapman, Pres., (203) 726-6241

Total real estate portfolio assets: $12.6 billion
Total pension fund real estate assets: $1.5 billion
Pension fund real estate clients: 460
Asset breakdown: 25% office, 23% industrial, 29% retail, 11% hotel, 10% residential, 2% land
Participation offered: Diversified open-end account, specialized closed-end retail fund, direct investment opportunities, individual managed accounts, tax-advantaged accounts
Geographic diversificiation: National
Minimum investment: Open-end, $100,000; closed-end, $1 million; foundations and endowments, $500,000
Return on investment: Varies
Fee: Varies by investment product

CITICORP REAL ESTATE INVESTMENT MANAGEMENT
153 East 53rd St., 15th Fl., Zone 1
New York, NY 10043
Contact: H. Piper Andrews, VP, (212) 559-9332

Total real estate portfolio assets: $1.7 billion
Total pension fund real estate assets: $1.7 billion
Pension fund real estate clients: 38
Asset breakdown: 73% office, 6% industrial, 21% retail
Participation offered: Open-end fund (CREEF), separate accounts
Geographic diversification: 53% East, 8% South, 9% Midwest, 30% West
Minimum investment: CREEF - $1 million, separate accounts - $15 million
Return on investment: Cumulative - 20.9% CREEF from 1980-88; latest annual - 1.3% income, .2% appreciation, gross of fees, 1.5% total (gross of fees)
Fee: 100 basis points per year, charged quarterly on the net real estate assets of the fund (CREEF), and 15 basis points per year deducted quarterly on cash reserve

COLDWELL BANKER COMMERCIAL REALTY ADVISORS
533 South Fremont
Los Angeles, CA 90071
Contact: Bob Morris, First VP, (213) 613-6025

Total real estate portfolio assets: $993.2 million
Total pension fund real estate assets: $928.9 million
Pension fund real estate clients: 43
Asset breakdown: 36.3% office, 29.8% industrial, 26.9% retail, 2.2% hotel, .4% land, 4.4% other
Participation offered: Closed-end funds and separate accounts
Geographical diversification: 37.5% West, 19% Midwest, 12.8% South Central, 7.2% Southeast, 23.5% East
Minimum investment: $10 million
Return on investment: 6% real rate of return over 10-year hold
Fee: Negotiable

COPLEY REAL ESTATE ADVISORS
399 Boylston St.
Boston, MA 02116
Contact: John C. Phillips Jr., Managing Director, (617) 578-1285

Total real estate portfolio assets: $13.2 billion
Total pension fund real estate assets: $8.9 billion
Pension fund real estate clients: 225
Asset breakdown: 26% office, 25% industrial, 6% retail, 1% hotel, 1% residential, 41% land
Participation offered: Open-end fund, closed-end funds, and separate accounts
Geographic diversification: National
Minimum investment: Open-end $100,000, initial contribution; $25,000 subsequent contributions
Return on investment: Cumulative - 16.8% (gross), 1982-88; latest annual - 7.1%
Fee: Annual fee for the open-end fund is 1.25% of the net real estate and .25% of other assets calculated on the last business day of the calendar quarter

CORPORATE PROPERTY INVESTORS
305 E. 47th St.
New York, NY 10038
Contact: William J. Lyons, Asst. Gen. Counsel, (212) 421-8200

Total real estate portfolio assets: $4.3 billion
Total pension fund real estate assets: $2.7 billion
Pension fund real estate clients: 27
Asset breakdown: 12% office, 4% industrial, 84% retail
Participation offered: REIT
Geographic diversification: 42% Northeast, 7% Midwest, 34% South, 17% West
Minimum investment: $10 million
Return on investment: Cumulative - 18.76%, 13 years; latest annual - 13.53%
Fee: No direct fees. The cost of managing the REIT is less than 1% of the average appraised net asset value

COVENTRY INVESTMENT GROUP INC.
1050 One Riverway
Houston, TX 77056
Contact: W. Carey Whitehead, Sr. VP, (713) 896-9999

Total real estate portfolio assets: $259 million
Total pension fund real estate assets: $259 million
Pension fund real estate clients: 5

Asset breakdown: 100% office
Participation offered: Separate accounts
Geographic diversification: East Coast, West Coast, Texas
Minimum investment: $25 million
Return on investment: Cumulative - 12% - IRR on 10 year reversion
Fee: General partner as co-investor with pension fund minimal general partner fee - 25 basis points

CRESTAR BANK
P.O. Box 26665
Richmond, VA 23261
Contact: B.J. Meredith Jr., VP, (804) 782-5430

Total real estate portfolio assets: $33.5 million
Total pension fund real estate assets: $25.6 million
Pension fund real estate clients: 135
Asset breakdown: 23% office, 9% industrial, 67% retail
Participation offered: Open-end funds, separate accounts
Geographic diversification: Southeast
Minimum investment: $10,000
Return on investment: 14.1% 4/1/87-3/31/88; latest annual - 11.1%
Fee: 1% on real estate value, ⅜% on cash

D.A. MANAGEMENT INC.
7777 Center Ave., Suite. 500
Huntington Beach, CA 92647
Contact: Daniel B. Ardell, Exec. VP, (714) 891-6080

Total real estate portfolio assets: $115 million
Total pension fund real estate assets: $107 million
Pension fund real estate clients: 2
Asset breakdown: 73% industrial, 27% retail
Geographic diversification: Southern California; Phoenix, Ariz.
Minimum investment: $5 million
Return on investment: Cumulative - 11.5%, 10 years; latest annual - 8%, (1/88-12/88)
Fee: Negotiable

DREYFUS REALTY ADVISORS
One Rockefeller Plaza, Suite 1005
New York, NY 10020
Contact: Francis X. Tansey, (212) 956-3740

Total real estate portfolio assets: $300 million
Total pension fund real estate assets: $300 million
Pension fund real estate clients: 1
Asset breakdown: 75% office, 25% retail
Participation offered: Separate account, co-investments
Geographical diversification: 75% Northeast, 10% Midwest, 15% Southeast
Minimum investment: $10 million
Return on investment: Latest annual - 11.9%
Fee: Negotiable

EASTDIL ADVISERS INC.
40 W. 57th St.
New York, NY 10019
Contact: Robert T. Davis, (212) 315-7200

Total real estate portfolio assets: $2 billion
Total pension fund real estate assets: $164 million
Pension fund real estate clients: 4
Asset breakdown: 69.9% office, 10.3% industrial, 16.9% retail, .3% hotel, 2.4% residential, .3% land
Participation offered: Separate accounts
Geographic diversification: 1.6% East, 52.3% South, 10% Midwest, 36.4% West
Minimum investment: $10 million
Return on investment: Cumulative - 7.8%, 6 year (1982-88); latest annual - 6.4%
Fee: Varies

THE EDGECOMBE GROUP
196 Adelaide St., W.
Toronto, Ontario, Canada M5H 1W7
Contact: Michael F. Walsh, Director, (416) 977-1980

Total real estate portfolio assets: $850 million
Total pension fund real estate assets: $150 million
Pension fund real estate clients: 68
Asset breakdown: 30% office, 45% industrial, 25% retail
Participation offered: Open-end pool, closed-end pool, separate accounts
Geographic diversification: 36% Ontario, 23% Quebec, 15% Prairies, 11% Maritimes, 15% British Columbia
Minimum investment: 0
Return on investment: Cumulative - 17.2% for 1-year period; latest annual - 19.2%
Fee: Available upon request

EQUITABLE AGRI-BUSINESS INC.
1040 Crown Pointe Parkway, Suite 780
Atlanta, GA 30338
Contact: Joyce Niggley, VP, (404) 668-5217

Total real estate portfolio assets: $2.1 billion
Total pension fund real estate assets: $834 million
Pension fund real estate clients: 4
Asset breakdown: 10% land, 90% mortgages
Participation offered: Separate account
Geographical diversification: West, Southwest, Southeast
Minimum investment: $25 million
Return on investment: Latest annual - 11.1%
Fee: Not available

EQUITABLE REAL ESTATE INVESTMENT MANAGEMENT INC.
787 Seventh Ave., 46th Floor
New York, NY 10019
Contact: Joyce R. Frater, Sr. VP, (212) 554-4213

Total real estate portfolio assets: $33.3 billion
Total pension fund real estate assets: $18.4 billion
Pension fund real estate clients: 285
Asset breakdown: 43% office, 13% industrial, 38.3% retail, 5.1% hotel, .6% other
Participation offered: Open-end core or closed-end special-focus funds, as well as individually managed accounts
Geographic diversification: National
Minimum investment: $1 million - open-end funds, $2 million - closed-end funds; $100 million over 3 years for single client accounts.
Return on investment: Not available
Fee: First $10 million 1.25%; next $15 million 1.1%, next $25 million .9%, over $50 million .8%

EQUITEC INSTITUTIONAL REALTY ADVISERS INC.
7677 Oakport St.
Oakland, CA 94614
Contact: Don Jackson, Pres., (415) 729-7272

Total real estate portfolio assets: $1.4 billion
Total pension fund real estate assets: $122 million
Pension fund real estate clients: 22
Asset breakdown: 90% office, 4% light industrial, 6% retail
Participation offered: Closed-end funds and separate accounts.
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Not applicable. Returns are quoted on a fund basis, not on the entire institutional portfolio as a whole.
Fee: Equitec Institutional Real Estate Fund IV (group trust) 1.15% asset management fee. Transaction: 1% of both property acquisition costs and gross sales proceeds

F.I.A. ASSOCIATES
1601 Response Road, Suite 300
Sacramento, CA 95815
Contact: Winston H. Hickox, Exec. VP, (916) 920-4051

Total real estate portfolio assets: Not available
Total pension fund real estate assets: $2 billion
Pension fund real estate clients: 7
Asset breakdown: 51% office, 16% industrial, 18% retail, 9% hotel, 5% residential, 1% land
Participation offered: Closed-end commingled funds, separate accounts and limited partnerships
Geographic diversification: National
Minimum investment: $50 million
Return on investment: Not available
Fee: Negotiable. Typical fees for a separate account may include acquisition fees of 1% and asset management fees of approximately .75% per annum

FIRST ASSET REALTY ADVISORS
First Bank Place East
Minneapolis, MN 55480
Contact: Charles S. Ingwalson, Pres., (612) 370-4729

Total real estate portfolio assets: $86.7 million
Total pension fund real estate assets: $80.4 million
Pension fund real estate clients: 16
Asset breakdown: 10.5% office, 89.5% retail
Participation offered: Open-end fund
Geographic diversification: 13.2% East, 31.3% Midwest, 36.8% South, 18.7% West
Minimum investment: $500,000
Return on investment: 10.5% annualized 1982-1988
Fee: 1.25% on net asset value

FIRST CHICAGO INVESTMENT ADVISORS
3 First National Plaza
Chicago, IL 60670-0109
Contact: Edward C. Hamill, Managing Director, (312) 732-4100

Total real estate portfolio assets: $914 million
Total pension fund real estate assets: $831 million
Pension fund real estate clients: 80
Asset breakdown: 25.1% office, 14.5% industrial, 15.8% retail, 29.7% residential, 14.9% land
Participation offered: Open-end funds, closed-end funds and separate accounts
Geographic diversification: 32.2% East, 22.1% South, 17.1% Midwest, 28.6% West
Minimum investment: $500,000
Return on investment: Cumulative - 10.6% (10 years ending 12/31/88); latest annual - 4.8%
Fee: Annual fee of 1.2%

FIRST WACHOVIA BANK
301 N. Main St. - 5 West
Winston-Salem, NC 27150
Contact: Robert Smedley, Sr. VP, (919) 770-6466

Total real estate portfolio assets: $707.3 million
Total pension fund real estate assets: $677.7 million
Pension fund real estate clients: 239
Asset breakdown: 19.9% office, 47.5% industrial, 28.5% land, 9.1% other
Participation offered: Open-end fund and separate accounts
Geographic diversification: 43.5% West, 23% Midwest, 12.8% South, 20.7% East
Minimum investment: $100,000
Return on investment: Cumulative - 6.2% for 3 years, 8.5% for 5 years, 12.5% for 10 years; latest annual - 6.4% net 12/31/88

Fee: 1.125% on gross asset value of real estate properties, per year, billed quarterly .25% per year, on cash reserves deducted quarterly

FIRST WACHOVIA CORP. TIMBERLAND INVESTMENTS
P.O. Box 3099
Winston-Salem, NC 27150
Contact: James F. Webb Jr., VP, (919) 770-4878

Total real estate portfolio assets: $50 million
Total pension fund real estate assets: $37 million
Pension fund real estate clients: 5
Asset breakdown: 100% timber
Participation offered: open-end fund, separate accounts.
Geographical diversification: Southeast
Minimum investment: $500,000
Return on investment: Cumulative - 7.6% from 3/31/81 to 3/31/89, latest annual - 19.8% (1988), last 12 months 3/31/89 18.%
Fee: 1.2% of assets invested year plus .25% per year invested in cash

FIRST WISCONSIN TRUST CO.
P.O. Box 2054
Milwaukee, WI 53201
Contact: Earl D. Lillydahl, VP, (414) 765-4844

Total real estate portfolio assets: $20 million
Total pension fund real estate assets: $12 million
Pension fund real estate clients: 38
Asset breakdown: 34% office, 33% industrial, 33% retail
Participation offered: Open-end
Geographic diversification: Midwest
Minimum investment: $10,000
Return on investment: Cumulative - 9.9% for 6 yrs.; latest annual - 9.8%
Fee: 1.5% on real estate assets, .25% on liquid assets

FOREST INVESTMENT ASSOCIATES
One Premier Plaza, Suite 710
5605 Glenridge Drive
Atlanta, GA 30342
Contact: Charles M. Tarver, Dir. of Acq., (404) 847-0794

Total real estate portfolio assets: $45 million
Total pension fund real estate assets: $29 million
Pension fund real estate clients: 1
Asset breakdown: 100% timber
Participation offered: Separate accounts
Geographic diversification: South
Minimum investment: $10 million
Return on investment: Cumulative - 29.8% (3/31/87 - 12/31/88), latest annual - 13% for year ending 12/31;88
Fee: 1.2% per annum, taken quarterly, on net asset value

FS REALTY PARTNERS
1400 Three Lincoln Centre
Dallas, TX 75240
Contact: Richard G. Sesler, Managing Partner, (214) 386-9800

Total real estate portfolio assets: $500 million
Total pension fund real estate assets: $325 million
Pension fund real estate clients: 9
Asset breakdown: 17% office, 8% industrial, 59% retail, 16% residential
Participation offfered: Closed-end funds and separate accounts.
Geographical diversification: National
Minimun investment: Varies
Return on investment: Not available
Fee: Not available

GROUP ONE INVESTMENTS
77 W. Washington St., Suite 1005
Chicago, IL 60602
Contact: Robert H. Weitzman, Finance Partner, (312) 346-3434

Total real estate portfolio assets: $200 million
Total pension fund real estate assets: $25 million
Pension fund real estate clients: 50
Asset breakdown: 10% office, 10% industrial, 25% retail, 5% hotel, 45% residential, 5% land/farm
Participation offered: Special accounts
Geographic diversification: National
Minimum investment: $500,000
Return on investment: Cumulative - 9%
Fee: Negotiable

GRUBB & ELLIS REALTY ADVISERS
One Montgomery St.
Telesis Tower, Suite 3200
San Francisco, CA 94104
Contact: Richard Cortese, VP & Director of Mktg., (415) 956-1990

Total real estate portfolio assets: $673 million
Total pension fund real estate assets: $166 million
Pension fund real estate clients: 10
Asset breakdown: 25% office, 37% industrial, 15% retail, 20% residential, 3% land
Participation offered: Separate accounts, closed-end industrial fund
Geographic diversification: 10% Midwest, 59% West, 31% South
Minimum investment: $1 million for funds, $25 million for separate accounts
Return on investment: Cumulative - 10.3%
Fee: Varies by fund for closed-end funds. Typically negotiated for each individual separate account

JOHN HANCOCK FINANCIAL SERVICES HANCOCK TIMBER RESOURCE GROUP
P.O. Box 111
T-49 Investment Marketing
Boston, MA 02117
Contact: Richard N. Smith Sr., Timber Investment Officer, (617) 572-4525

Total real estate portfolio assets: $364 million
Total pension fund timber real estate assets: $347 million
Pension fund timber real estate clients: 12
Asset breakdown: 100% timber
Participation offered: Closed-end and open-end separate accounts (both pooled and non-pooled); closed-end funds
Geographic diversification: 38% Pacific Northwest, 62% Southeast
Minimum investment: $1 million for pooled funds, $20 million for non-pooled accounts
Return on investment: Varies
Fee: Varies

JOHN HANCOCK PROPERTIES INC.
Two Copley Place, Suite 200
Boston, MA 02117
Contact: Susan J. Falconer, Mktg. Officer, (617) 572-3864

Total real estate portfolio assets: $2 billion
Total pension fund real estate assets: $742 million
Pension fund real estate clients: 73
Asset breakdown: 38.5% office, 6.2% industrial, 5% retail, 20.2% hotel, 30% residential, .1% land
Participation offered: Limited partnership and separate account
Geographic diversification: 36% East, 30% South, 15% Midwest, 17% West, 2% other
Minimum investment: Varies by fund
Return on investment: Varies
Fee: Varies

HARRIS TRUST & SAVINGS BANK
111 W. Monroe St. - 6C
P.O. Box 755
Chicago, IL 60690
Contact: John K. Rutledge, VP-Dir. Trust R.E. Investment, (312) 461-6346

Total real estate portfolio assets: $41 million
Total pension fund real estate assets: $34 million
Pension fund real estate clients: 180
Asset breakdown: 33% office, 23% industrial, 30% retail, 14% other
Participation offered: Open-end fund
Geographic diversification: National
Minimum investment: $500,000
Return on investment: Cumulative - 67.4% 1/1/83-12/88; latest annual - 6.7%
Fee: .9% of real estate investments plus graduated account administration fee

HAYDEN, TOLZMANN & ASSOCIATES INC.
693 Bloomfield Ave.
P.O. Drawer 708
Bloomfield, CT 06002-0708
Contact: Debra De Vries-Dalton, VP, (203) 243-1481

Total real estate portfolio assets: $48 million
Total pension fund real estate assets: $48 million
Pension fund real estate clients: 3
Asset breakdown: 67% office, 10.5% industrial, 14.7% retail, 7.8% other
Participation offered: Separate accounts
Geographic diversification: 22.3% West, 29.7% South, 48% Midwest
Minimum investment: $14 million
Return on investment: Cumulative - 11.2% for 5 years; latest annual - 5.9%
Fee: 1% acquisition and disposition fees; ½ of 1% annual asset management fee

HEITMAN ADVISORY CORP.
180 N. LaSalle St., Suite 3600
Chicago, IL 60601
Contact: David Glickman, Pres., (312) 855-5700

Total real estate portfolio assets: $5.6 billion
Total pension fund real estate assets: $5.3 billion
Pension fund real estate clients: 70
Asset breakdown: 46.6% office, 12.6% industrial, 29.7% retail, 11.1% other
Participation offered: Closed-end group trust, nondiscretionary and discretionary separate account, and closed-end limited partnership
Geographic diversification: 22.1% East North Central, 7.6% Mideast, 3.2% Mountain, 19.5% Northeast, 20.8% Pacific, 6.3% Southeast, 4.4% Southwest, 16.1% West North Central
Minimum investment: Closed-end $1 million, separate account $25 million, closed-end limited partnership $1 million
Return on investment: Cumulative - 13.8% for 7 years ending 12/31/88, latest annual - 9.2%
Fee: Based on cash invested

JMB INSTITUTIONAL REALTY CORP.
900 N. Michigan Ave., Suite 1800
Chicago, IL 60611-1885
Contact: John S. Lillard, Pres., (312) 915-1900

Total real estate portfolio assets: $20 billion
Total pension fund real estate assets: $8 billion
Pension fund real estate clients: 170
Asset breakdown: (Excluding CFCL Acquisition Corp.) 45% office, 3% industrial, 44% retail, 8% residential
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National

Minimum investment: JMB Group Trust funds - $1 million
Return on investment: Varies
Fee: JMB Group Trust I and II - 1.25% of gross real estate asset value plus up to 5% of gross revenues from property operations as property management fees. JMB Group Trusts III, IV and V-1.25% of gross real estate asset value plus 3.75% of gross revenues from property operations as property management fees. Endowment and Foundation Realty Funds I-IV - 1.25% of gross real estate asset value plus up to 5% of gross revenues from property operations as property management fees. JMB Institutional Apartment Partnership-I - 1% of gross offering proceeds as acquisition fee. General partners receive 15% of distributable cash from operations and 15% of net sale proceeds after return to Limited Partners of their capital contributions. Separate accounts - negotiated

KARSTEN REALTY ADVISORS
12121 Wilshire Blvd., #900
Los Angeles, CA 90025
Contact: Carl A. Mayer Jr., Principal; A. Redmond Doms Jr., Principal, (213) 826-0035

Total real estate portfolio assets: $1.2 billion
Total pension fund real estate assets: $570 million
Pension fund real estate clients: 20
Asset breakdown: 47% office, 7% industrial, 19% retail, 9% hotel, 18% other
Participation offered: Separate accounts, closed-end funds, open-end funds
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Cumulative - 9.5% (3 years); latest annual - 10.3%
Fee: Tailored, depending upon client's investment/management requirements

KENNEDY ASSOCIATES REAL ESTATE COUNSEL INC.
2400 Financial Center Bldg.
Seattle, WA 98161
Contact: Ronald D. Roberts, Sr. VP, (206) 623-4739

Total real estate portfolio assets: $890 million
Total pension fund real estate assets: $890 million
Pension fund real estate clients: 5
Asset breakdown: 50% office, 46% industrial, 3% retail, 1% hotel
Participation offered: Separate accounts, open-end commingled fund
Geographic diversification: National
Minimum investment: Separate accounts - $25 million; commingled fund - $1 million
Return on investment: Cumulative - 17.5% compound annual rate of return, 13 years ending 12/31/88; latest annual - 10%
Fee: Varies

LASALLE ADVISORS LIMITED
11 S. LaSalle St.
Chicago, IL 60603
Contact: Kenneth M. Campia, Pres., (312) 782-5800

Total real estate portfolio assets: $2.6 billion
Total pension fund real estate assets: $2.6 billion
Pension fund real estate clients: 93
Asset breakdown: 67.6% office, 8.2% industrial, 19.4% retail, 4.8% other (multi-use)
Participation offered: Closed-end funds, separate accounts
Geographical diversification: 29% West, 17% South, 32% Midwest, 22% East
Minimum investment: $5 million with exceptions
Return on investment: Cumulative - 15.7% (3/81-3/89); latest annual - 12.9% (pre-fee), 11.7% (post-fee)
Fee: Annually, 1.25% of net real estate assets

LATIMER & BUCK
121 S. Broad Street
Philadelphia, PA 19107
Contact: M. Andrew Sheffler, VP, (215) 985-3917

Total real estate portfolio assets: $833.3 million
Total pension fund real estate assets: $833.3 million
Pension fund real estate clients: 2
Asset breakdown: 72% office, 13% industrial, 8% retail, 5% hotel, 2% residential
Participation offered: Separate accounts
Geographical diversification: 77% East, 6% South, 14% Midwest, 3% West
Minimum investment: $5 million; however the minimum amount depends on the size of the existing real estate portfolio for the investor
Return on investment: Latest annual - 10.2%
Fee: Acquisition and disposition fees graduated down as investment size increases: first $25 million - 1% acquisition, .75% disposition; next $50 million - .75% acquisition, .50% disposition; over $75 million - .50% acquisition, .50% disposition

LEHNDORFF & BABSON REAL ESTATE COUNSEL
One Memorial Drive, 11th Floor
Cambridge, MA 02142
Contact: James S. White, Exec. VP, (617) 225-3800

Total real estate portfolio assets: $1.8 billion
Total pension fund real estate assets: $1.8 billion
Pension fund real estate clients: 56
Asset breakdown: 51% office, 5% industrial, 44% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million for closed-end funds; $25 million for separate accounts
Return on investment: Varies by fund
Fee: Commingled funds; management fee: (a) 1.25% per annum based on fair market value of real property assets of the group trust as of 12/31/87; (b) 4% of the gross revenues earned by the group trust which are recieved during such calendar month from all real property in which the group trust directly or indirectly made as investment. Lehndorff & Babson Real Estate Counsel's fees cover both investment and property management. Fees shown by other funds may not include both phases of management. Separate account - receives as compensation an annual asset management fee of .5% of the gross value of the real estate portfolio, plus one-time fees for each property 1.5% of the gross purchase price and 1% of the gross sale proceeds. If the advisor also serves as property manager, it receives a fee which is normal and customary for such services

LIEBERMAN COS.
199 Middle Neck Road
Great Neck, NY 11021
Contact: Bruce R. Lieberman, Pres., (516) 466-6565

Total real estate portfolio assets: $150 million
Total pension fund real estate assets: $25 million
Pension fund real estate clients: 20
Asset breakdown: 20% office, 5% industrial, 5% retail, 70% residential
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $250,000
Return on investment: Varies
Fee: Negotiable

LOEB PARTNERS REALTY
521 Fifth Ave.
New York, NY 10175
Contact: Gary L. Naughton, VP, (212) 883-0371

Total real estate portfolio assets: $650 million
Total pension fund real estate assets: $175 million
Pension fund real estate clients: 2
Asset breakdown: 85% office, 15% retail
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $5 million
Return on investment: 12%-18% annual yields
Fee: A percentage of real estate assets based upon asset size and type of investment

LOMAS ADVISORS
2001 Bryan Tower, Suite 3300
Dallas, TX 75201
Contact: Webb Sowden Jr., Exec VP, (214) 746-8207

Total real estate portfolio assets: $961 million
Total pension fund real estate assets: $961 million
Pension fund real estate clients: 40
Asset breakdown: 71% office, 19% industrial, 7% retail, 3% residential
Participation offered: Closed-end funds and separate account management
Geographic diversification: National
Minimum investment: $1 million for commingled funds, $25 million for separate accounts
Return on investment: Cumulative - 12.7% total return for 5 years ending 1988
Fee: Annual fee, 1%-1.25%

MIG COS.
1645 Palm Beach Lakes Blvd., Suite 600
West Palm Beach, FL 33401
Contact: Larry Wright, Exec. VP, (407) 686-1800

Total real estate portfolio assets: $1.1 billion
Total pension fund real estate assets: $1.1 billion
Pension fund real estate clients: 8
Asset breakdown: 36.6% office, 5% industrial, 18% retail, 10% hotel, 23.3% residential, .6% land, 7.1% other
Participation offered: Closed-end funds, individual accounts
Geographic diversification: National
Minimum investment: $250,000
Return on investment: Not available
Fee: Administrative: .25%-.50%; acquisition: 1%-3%; management: .25%-.50%

MASSACHUSETTS MUTUAL LIFE INSURANCE CO.
1295 State St.
Springfield, MA 01111
Contact: Leo J. Polverini Jr., VP, (413) 788-8411

Total real estate portfolio assets: $6.2 billion
Total pension fund real estate assets: $63 million
Pension fund real estate clients: 45
Asset breakdown: 42% office, 23% industrial, 35% retail
Participation offered: Open-end and separate account
Geographic diversification: 16% East, 11% South, 21% Midwest, 52% West
Minimum investment: $100,000
Return on investment: Cumulative - 8.6%, 7 years (12/31/88); latest annual - 6.4%
Fee: Annual internal management fee of 1% is deducted before a unit value is determined

McMAHAN REAL ESTATE ADVISORS INC.
201 California St., Suite 400
San Francisco, CA 94111
Contact: John McMahan, Pres., (415) 433-7770

Total real estate portfolio assets: $568 million
Total pension fund real estate assets: $503 million
Pension fund real estate clients: 10

Asset breakdown: 34% office, 20% industrial, 46% retail
Participation offered: Separate accounts
Geographic diversification: West
Minimum investment: $50 million over two years
Return on investment: Cumulative - 9.7% 5 yrs., 9.2%, 3 yrs. (pre-fee); latest annual - 11% (pre-fee)
Fee: Based upon investment amount

H.D. McNEE REALTY ADVISERS

9333 Genesee Ave. #P25
San Diego, CA 92121
Contact: Henry H. Williams, Exec. VP, (619) 452-7551

Total real estate portfolio assets: $58 million
Total pension fund real estate assets: $58 million
Pension fund real estate clients: 3
Asset breakdown: 81% office/retail, 8% hotel, 11% residential
Participation offered: Separate accounts
Geographic diversification: Southwest
Minimum investment: Flexible
Return on investment: Not available
Fee: Negotiable

MELLON REAL ESTATE INVESTMENT MANAGEMENT CORP.

8 Stamford Forum
Stamford, CT 06901
Contact: Lawrence Kash, Pres., (203) 353-0888

Total real estate portfolio assets: $800 million
Total pension fund real estate assets: $800 million
Pension fund real estate clients: 11
Asset breakdown: 58% office, 14% industrial, 23% retail, 5% residental
Participation offered: Separate accounts
Geographic diversification: 20% East, 22% South, 35% Midwest, 23% West
Minimum investment: $10 million
Return on investment: Not available
Fee: Negotiable

L.J. MELODY & CO.

5847 San Felipe, Suite 4400
Houston, TX 77057
Contact: Robert D. Barkley, VP, (713) 787-1900

Total real estate portfolio assets: $2.1 billion
Total pension fund real estate assets: $837 million
Pension fund real estate clients: 3
Asset breakdown: 60.5% office, 34.4% retail, 5.1 residental
Participation offered: Separate accounts, closed-end funds
Geographic diversification: National
Minimum investment: $50 million - separate accounts; $10 million - commingled funds.
Return on investment: Not available
Fee: Not available

MERCANTILE BANK

P.O. Box 387
St. Louis, MO 63166
Contact: William H. Laird, VP, (314) 425-2742

Total real estate portfolio assets: $7.7 million
Total pension fund real estate assets: $7.7 million
Pension fund real estate clients: 20
Asset breakdown: 22% office, 16% industrial, 32% retail, 7% hotel, 11% residential, 2% land, 10% other
Participation offered: Open-end fund
Geographic diversification: 27% East, 16% Midwest, 27% South, 30% West
Minimum investment: $100,000
Return on investment: Cumulative - 15.7% (6/1/86-12/31/88); latest annual - 1.9%
Fee: .6% of assets plus .25% of cash

METRIC INSTITUTIONAL REALTY ADVISORS

950 Tower Lane
Foster City, CA 94404
Contact: Robert A. Fiddaman, Pres., (415) 378-7000

Total real estate portfolio assets: $1.9 billion
Total pension fund real estate assets: $197 million
Pension fund real estate clients: 28,698
Asset breakdown: 17% office, 32% industrial, 33% retail, 18% residential
Participation offered: Closed-end funds, separate accounts and specified assets
Geographic diversification: National (23 targeted markets)
Minimum investment: $500,000 (commingled), $25 million (separate account)
Return on investment: Cumulative - 9.7% (5 years), latest annual - 11.%
Fee: Dependent upon particular type of account services required

MONY REAL ESTATE INVESTMENT MANAGEMENT

1740 Broadway
New York, NY 10021
Contact: Robin L. Blauer, Investment VP, (212) 708-2027

Total real estate portfolio assets: $1.5 billion
Total pension fund real estate assets: $60.6 million
Pension fund real estate clients: 50
Asset breakdown: 54% office, 11% industrial, 34% retail
Participation offered: Open-end funds, mortgage separate accounts, real estate equity separate accounts
Geographic diversification: National
Minimum investment: Not available
Return on investment: Not available
Fee: Not available

MORGUARD INVESTMENTS LIMITED

1027 Yonge St.
Toronto, Ontario, CN M4W 3E8
Contact: W.A. Houghton, Sr. VP/Inv., (416) 323-7545

Total real estate portfolio assets: $1.5 billion (Canadian)
Total pension fund real estate assets: $1.5 billion (Canadian)
Pension fund real estate clients: 36
Asset breakdown: 34% office, 25% industrial, 30% retail, 9% hotel, 2% land
Participation offered: Investment consortium, series of closed end pools with one or a number of assets in each
Geographical diversification: Canada
Minimun investment: Not available
Return on investment: Cumulative - 16.5% 5/75 to 12/88, latest annual - 16.2% 12/87 to 12/88
Fee: 1.5% - .75% acqusition and disposition. 6% of net property income-asset management. Net property income is otherwise referred to as net operating income, i.e. property income less expenses, before debt

METROPOLITAN LIFE

One Madison Ave. - 8H
New York, NY 10010
Contact: Michael Walker, Asst. VP, (212) 578-3343

Total real estate portfolio assets: $24 billion
Total pension fund real estate assets: $913 million
Pension fund real estate clients: 141
Asset breakdown: 47% office, 20% industrial, 24% retail, 3% hotel, 6% residential, .2% land, .1% other
Participation offered: Open-end, closed-end and separate accounts
Geographical diversification: 21% East, 28% South, 14% Midwest, 37% West
Minimum investment: Open-end $100,000; closed-end $1 million; separate accounts $25 million
Return on investment: Latest annual - 11%
Fee: Per contract holder - 1.25% for first $10 million; 1% for additional investment. Separate accounts - negotiable

MREALTY CORP.

P.O. Box 655415
14 MPlace
Dallas, TX 75265-5415
Contact: Frank W. Tilley, Pres., (214) 290-3500

Total real estate portfolio assets: $330 million
Total pension fund real estate assets: $76 million
Pension fund real estate clients: 75
Asset breakdown: 10% office, 35% industrial, 55% retail
Participation offered: Open-end fund, separate accounts
Geographic diversification: 30% Southeast, 45% Southwest, 25% West
Minimum investment: $50,000 in fund
Return on investment: Cumulative - 5.6% 5 years; latest annual - 8.5%
Fee: Fund - 1% acquisition fee, 1% disposition fee, 1% asset management fee on real estate assets, .5% on cash equivalents. Separate accounts - negotiated

MUTUAL BENEFIT LIFE INSURANCE CO.

2323 Grand Ave.
Kanasas City, MO 64108
Contact: John D. Master, Second VP, (816) 474-2300

Total real estate portfolio assets: $5.4 billion
Total pension fund real estate assets: $26 million
Pension fund real estate clients: 330
Asset breakdown: 36% office, 57% industrial, 7% retail
Participation offered: Open-end separate account
Geographic diversification: National
Minimum investment: $20,000
Return on investment: Cumulative - 3.7% (ended 6/30/89); latest annual - 12%
Fee: .44% quarterly

NBD MORTGAGE CO.

900 Tower Drive, 4th Floor
Troy, MI 48098
Contact: Richard O. McGee, VP, (313) 828-2340

Total real estate portfolio assets: $120 million
Total pension fund real estate assets: $9 million
Pension fund real estate clients: 1
Asset breakdown: 100% office
Participation offered: Participating mortgages, separate accounts, launching closed-end fund 1989
Geographical diversification: Michigan, Indiana, Illinois and Northern Ohio
Minimum investment: $1 million
Return on investment: Not available
Fee: .10%-.125% annual asset servicing fee based on declining mortgage balance

NCNB NATIONAL BANK

One NCNB Plaza (T09-1)
Charlotte, NC 28255
Contact: Mark S. Coltrin, VP, (704) 374-8405

Total real estate portfolio assets: $651 million
Total pension fund real estate assets: $680 million
Pension fund real estate clients: 683
Asset breakdown: 13.9% office, 37.2% industrial, 5% residential, 43.9% land

Participation offered: Open-end fund, closed-end fund, separate accounts
Geographic diversification: Southeast
Minimum investment: None in open-end fund, $50 million for separate accounts; closed-end fund is not accepting contributions
Return on investment: 14.5% (10 yr. annualized return). Cumulative returns - 37% (3 yr. ending 12/31/88) and 87.8% (5 yr. ending 12/31/88), latest annual - 10.5% as of 12/31/88
Fee: Open-end fund - 1.2% of net assets annually; closed-end fund - 1% of net assets annually

NATIONAL PROPERTY ADVISORS

100 Galleria Parkway, N.W., Suite 1620
Atlanta, GA 30339-3122
Contact: Andrew B. McGregor, Pres. and CEO, (404) 988-9008

Total real estate portfolio assets: $300 million
Total pension fund real estate assets: $136 million
Pension fund real estate clients: 9
Asset breakdown: 18% office, 74% industrial, 6% retail, 2% land
Participation offered: Closed-end funds and separate accounts
Geographical diversification: National
Minimum investment: $2 million, closed-end fund; $20 million, separate account
Return on investment: Cumulative - NPP-II 9.5% 3 years, RCB-I 19.4% 1 year; latest annual - NNP-II 14.3%, RCB-I 14.5%
Fee: 1.2% per year, deducted quarterly, on the market value of the real estate assets (gross). .25% per year deducted quarterly on cash and cash equivalents. Incentive fee structures are acceptable. Separate account fee structure is negotiable

THE O'CONNOR GROUP

200 Park Ave., 51st Floor
New York, NY 10166
Contact: Peter R. Reilly, Principal, (212) 687-7420

Total real estate portfolio assets: $1.6 billion
Total pension fund real estate assets: $1.6 billion
Pension fund real estate clients: 20
Asset breakdown: 10% office, 19% industrial, 71% retail
Participation offered: Closed-end funds and separate accounts
Geographical diversification: National
Minimum investment: $10 million
Return on investment: Depends on targeted risk level of fund or account
Fee: Negotiable

THE PECKHAM BOSTON CO.

Four Longfellow Place, Suite 3305
Boston, MA 02114
Contact: John M. Peckham III, Pres., (617) 523-4440

Total real estate portfolio assets: $80 million
Total pension fund real estate assets: $80 million
Pension fund real estate clients: 4
Asset breakdown: 20% office, 10% industrial, 10% retail, [illegible] hotel, 50% residential
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $1 million
Fee: Varies

PENREAL ADVISORS LTD.

1090 West Georgia St., Suite 700
Vancouver, B.C., Canada V6E 3V7
Contact: Malcolm F. Leitch, VP, Finance, (604) 685-8351

Total real estate portfolio assets: $230 million (Canadian)
Total pension fund real estate assets: $230 million (Canadian)
Pension fund real estate clients: 70
Asset breakdown: 44% office, 24% industrial, 25% retail, 7% land
Participation offered: Closed-end funds
Geographic diversification: 11% Montreal, 14% Calgary, 33% Toronto, 42% Vancouver
Minimum investment: $500,000
Return on investment: Varies by fund
Fee: Advisor receives acquisition, disposition, property management, portfolio management and development fees. All fees are reviewed annually

THE PHOENIX

One American Row
Hartford, CT 06511
Contact: Charles W. McMullin Jr., Second VP, (203) 275-5302

Total real estate portfolio assets: $2.7 billion
Total pension fund real estate assets: $386 million
Pension fund real estate clients: 189
Asset breakdown: 30%(RESA) 26%(R1) office, 21% (RESA) industrial, 13% (R1) retail, 16% (RESA) hotel, 33% (RESA) 25% (R1) residential
Participation offered: one open-end fund (RESA), one separate account (R1) and is accepting commitments on closed-end fund (CEREA-I)
Geographic diversification: RESA - 26.6% Midwest, 20.9% East, 13.1% South, 39.5% West; R1 - 20% Midwest, 27% South, 8% East, 9% West
Minimum investment: RESA $50,000, CEREA-I $5 million, R1 $5 million
Return on investment: Cumulative - RESA - 5 year 12.6%; R1 - 11.4% since inception 3/14/88; latest annual - RESA - 7.4%; R1 - 11.4%
Fee: Varies

PMREALTY ADVISORS INC.

800 Newport Center Drive
Newport Beach, CA 92660
Contact: Pete Hammer, Managing Director, (714) 721-5000

Total real estate portfolio assets: $664 million
Total pension fund real estate assets: $474 million
Pension fund real estate clients: 33
Asset breakdown: 16% office, 46% industrial, 37% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $1 million
Return on investment: Cumulative - 8.5% initial income returns; 6%-8% Real returns; IRR target 11%-12%, latest annual - 14.5%
Fee: Acquisitions fee: 1.25% of capital contribution on each property purchase; asset management fee, .85%; incentive distribution fee, 10% of cash distributed in excess of 10% cumulative average return on average capital account balance

T. ROWE PRICE REALTY ADVISERS INC.

515 S. Flower St., Suite 3100
Los Angeles, CA 90071
Contact: Reid G. Samuelson, Pres.; Scott Calder, VP, (213) 239-8800

Total real estate portfolio assets: $280 million
Total pension fund real estate assets: $10 million
Pension fund real estate clients: 1
Asset breakdown: 24% office, 68% industrial, 8% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: 50% West, 11% East, 30% South, 9% Midwest
Minimum investment: $1 million
Return on investment: Cumulative - Fund I 7.7% for 3 years, Fund II 7.6% for 2 years, Fund III 8%, Fund IV 9%; latest annual - Fund I 6.6%, Fund II 7.6%, Fund III 8.01%, Fund IV 9%
Fee: Dependent on time and resources expended. Typically first year - 1.2% of total committed funds. Second year - .1% per month of the lesser of cost or value plus 10% of net cash flow in excess of 10% cumulative return, and 10% of sales proceeds after investors capital is returned and they have received a cumulative 10% per year return

THE PRINCIPAL FINANCIAL GROUP

711 High St.
Des Moines, IA 50309
Contact: Dan J. Fitzgerrell, Director-Pension Operations, (515) 247-6791

Total real estate portfolio assets: $9.5 billion
Total pension fund real estate assets: $151 million
Pension fund real estate clients: 1,531
Asset breakdown: 25% office, 63% industrial, 12% retail
Participation offered: Open-end real estate separate account
Geographic diversification: 37.3% Southeast, 10.3% Northeast, 23.1% Midwest, 23.8% Southwest, 5.5% Northwest
Minimum investment: None
Return on investment: Cumulative - 8% 5 year-period ending 12/31/88; latest annual - 4.9% average annual compound through 12/31;88
Fee: Over a year's time, firm deducts .96% of the value of the assets to cover investment management expenses

PROPERTY CAPITAL ASSOCIATES

One Post Office Sq., 21st Floor
Boston, MA 02110
Contact: Gary R. Schwandt, Director, (617) 536-8600

Total real estate portfolio assets: $1.5 billion
Total pension fund real estate assets: $500 million
Pension fund real estate clients: 20
Asset breakdown: 41% office, 7% industrial, 12% retail, 21% hotel, 19% residential
Participation offered: Publicly traded REITS, closed-end funds, separate accounts
Geographic diversification: 30% East, 32% Central, 26% West, 12% South
Minimum investment: $1 million
Return on investment: 17.6% for past 9 years (1979-88); latest annual - 15.4%
Fee: Performance-based

THE PRUDENTIAL ASSET MANAGEMENT CO.

19 Prudential Plaza
745 Broad St.
Newark, NJ 07102-3777
Contact: Dinsmore Fulton, Manager, Real Estate Marketing (201) 802-9747

Total real estate portfolio assets: $42.4 billion
Total pension fund real estate assets: $4.5 billion
Pension fund real estate clients: 311
Asset breakdown: 42.3% office, 14.4% industrial, 19.7% retail, 9.6% hotel, 13.3% residential, .6% land, .1% other
Participation offered: Open and closed-end equity real estate, participating mortgages, mortgages, single client accounts
Geographic diversification: 36% East, 35.1% West, 15.6% Midwest, 13.3% South
Minimum investment: Varies by fund

Return on investment: PRISA since inception (7/31/70-6/30/89), 11.5%, latest annual (6/30/88-6/30/89), 10.5%; PRISA II since inception (7/18/80-6/30/89), 14.1%, latest annual (6/30/88-6/30/89), 10.9%; PRACE since inception (7/1/83-6/30/89), 2.7%, latest annual (6/30/88-6/30/89), 3.4%; PRACE II since inception (1/18/85-6/30/89), 8.9%, latest annual (6/30/88-6/30/89), 10%; PRIMOR since inception (12/31/81-6/30/89), 14%, latest annual (6/30/88-6/30/89), 11.2%; MORISA since inception (12/31/81-6/30/89), 12.4%, latest annual (6/30/88-6/30/89), 10.5%; UMA since inception (6/30/87-6/30/89), 9.6%, latest annual (6/30/88-6/30/89), 10.5
Fee: Varies. Single client account fees are negotiable

PSI INSTITUTIONAL REALTY ADVISORS INC.

1015 Grandview Ave.
Glendale, CA 91201
Contact: William J. Chadwick, Pres., (818) 244-8080

Total real estate portfolio assets: $2.9 billion
Total pension fund real estate assets: $1 billion
Pension fund real estate clients: 146
Asset breakdown: 100% industrial
Participation offered: Closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $250,000 - closed-end fund, $15 million - separate account
Return on investment: Available on request
Fee: Firm receives 8% of distributable cash flow as an incentive fee until the investors receive amounts equal to their original investment. Thereafter, firm receives 25% of distributable cash flow, sales proceeds or financing proceeds

ROSEN ASSOCIATES

333 Jericho Turnpike
Jericho, NY 11753
Contact: Robert A. Rosen, Pres., (516) 822-5350

Total real estate portfolio assets: $350 million
Total pension fund real estate assets: $115 million
Pension fund real estate clients: 5
Asset breakdown: 6% office, 1% industrial 90% retail, 4% residential
Participation offered: Separate accounts, private investments
Geographic diversification: National
Minimum investment: $250,000
Return on investment: Varies from 9% to 18% over 5 years, Latest annual- 14%
Fee: Negotiable

RREEF

875 N. Michigan Ave., Suite 4114
Chicago, IL 60611
Contact: Stanislaw Maliszewski, Partner, (312) 266-9300

Total real estate portfolio assets: $3.6 billion
Total pension fund real estate assets: $3.6 billion
Pension fund real estate clients: 89
Asset breakdown: 35% office, 30% industrial, 35% retail
Participation offered: Closed-end commingled funds, separate accounts
Geographic diversification: 19% East, 19% Midwest, 17% South, 45% West
Minimum investment: USA Funds $5 million, West Funds $1 million, Mid America/East Funds $1 million, Apartment Fund-I $1 million, separate accounts - generally $100 million
Return on investment: Cumulative - 14.6% (1976-1988); latest annual - 9.1%
Fee: 1.2% on lower of cost or market, plus 4% of rental income. Fee includes property management services. Fees for RREEF's separates account clients are decided on a case-by case basis

FRANK RUSSELL TRUST CO.

645 Madison Ave.
New York, NY 10022
Contact: Virginia P. Sirusas, Sr. VP/Director Sales & Marketing, (212) 486-7744

Total real estate portfolio assets: Not available
Total pension fund real estate assets: $363 million
Pension fund real estate clients: 98
Asset breakdown: 35% office, 19.9% industrial, 21.5% retail, 5.9% hotel and residential, 17.7% other
Participation offered: Equity funds, open-ended funds, pooled real estate funds
Geographic diversification: 31.1% East, 41.4% West, 17.9% South, 9.6% Midwest
Minimum investment: $5 million
Return on investment: Cumulative - 10.8%, (4/1/84-12/31/88); latest annual - 7.9%
Fee: Real estate equity fund is 1.5%, includes investment management, trusteeship, custodianship, audit, client meetings

SCHRODER REAL ESTATE ASSOCIATES

437 Madison Ave.
New York, NY 10022
Contact: John E. Emmanuel, Sr. VP, (212) 486-9800

Total real estate portfolio assets: $900 million
Total pension fund real estate assets: $700 million
Pension fund real estate clients: 58
Asset breakdown: 38% office, 62% retail
Participation offered: Closed-end funds, separate accounts
Geographic diversification: 38% Northeast, 20% Southeast, 8% Midwest, 8% Southwest, 26% West
Minimum investment: Closed-end funds - $2 million; separate accounts - $50 million
Return on investment: Cumulative - 17.2% (9 yrs. 1980-88); latest annual - 12.1%
Fee: Varies

SENTINEL REAL ESTATE CORP.

1290 Avenue of the Americas
New York, NY 10104
Contact: Lewis Kresch, Sr. VP, (212) 408-2928

Total real estate portfolio assets: $1.6 billion
Total pension fund real estate assets: $1.3 billion
Pension fund real estate clients: 134
Asset breakdown: 5% office, 2% industrial, 7% retail, 86% residential
Participation offered: Open-end fund, closed-end funds, separate accounts
Geographic diversification: National
Minimum investment: $250,000 (open-end); $1 million (closed-end), $100 million (separate account)
Return on investment: Cumulative - 13.9%; latest annual - 6.9% 12 year history to 12/31/88
Fee: Varies

SIERRA CAPITAL INSTITUTIONAL ADVISORS

One Market Plaza, Suite 1600
Steuart Street Tower
San Francisco, CA 94905
Contact: A. Paul Johnson, Exec. VP, (415) 543-4141

Total real estate portfolio assets: $500 million
Total pension fund real estate assets: $42.5 million
Pension fund real estate clients: 7
Asset breakdown: 70% industrial, 30% retail
Participation offered: closed-end funds, REITS, separate accounts
Geographical diversification: 3% Northeast, 21% Southeast, 22% North Central, 16% South Central, 38% West
Minimum investment: $1 million
Return investment: Cumulative - 57.3% 1984-88, latest annual - 9.7%
Fee: 1.2% net annual asset management fee as a percentage of acquisition cost

SMITH BARNEY BIRTCHER REALTY ADVISORS

27611 La Paz Road
Laguna Niguel, CA 92656
Contact: Stanley L. Iezman, Chief Operating Officer, (714) 643-7525, or Ralph E. Heckert, Exec. VP, (203) 967-7032

Total real estate portfolio assets: $2.3 billion
Total pension fund real estate assets: $500 million
Pension fund real estate clients: 7
Asset breakdown: 30% office, 40% industrial, 30% retail
Participation offered: Closed-end commingled funds, separate account, co-investment and asset management strategies for under performing assets
Geographical diversification: 20% East, 20% South, 25% Midwest, 35% West
Minimum investment: $500,000 - commingled fund, $35 million - separate accounts
Return on investment: From 12/31/81 to 12/31/88, 14.8%. Real return since 12/31/88, 11.3%
Fee: Varies by fund

STANDARD LIFE ASSURANCE CO.

45 Sheppard Ave. East
Suite 940
Willowdale, Ont., CN M2N 5W9
Contact: Ed Quigg, Real Estate Manager, (416) 221-5663

Total real estate portfolio assets: $956 million
Total pension fund real estate assets: $50 million
Pension fund real estate clients: 100
Asset breakdown: 48% office, 30% industrial, 22% retail
Participation offered: Pooled real estate funds
Geographic diversification: Canada
Minimum investment: Not available
Return on investment: Cumulative - varies; latest annual - 19%
Fee: Varies

STATE STREET BANK & TRUST CO.

225 Franklin St.
Boston, MA 02110
Contact: Peter Braun, VP, (617) 654-3953

Total real estate portfolio assets: $821.7 million
Total pension fund real estate assets: $821.7 million
Pension fund real estate clients: 32
Asset breakdown: 33% office, 31% industrial, 34% retail, 2% residential
Participation offered: Units of closed-end commingled funds
Geographical diversification: 15% Northeast; 5% Mid-Atlantic; 13% Southeast; 9% North Central; 5% Midwest Central; 12% South Central; 41% West
Minimum investment: $5 million
Return on investment: Cumulative - 158.8% Fund I (Sept.'82-March '89), 75.5% Fund II (Jan. '84-March '89), 31.9% Fund III (Sept.'85-March '89), 15.86% Fund IV (Sept.'86-March '89), 11.6% Fund V (Dec.'87-March '89), 2.2% Fund VI (Jan.'89-March '89); latest annual (as of 3/31/89) - 8% Fund I, 12.7% Fund II, 13.8% Fund III, 4.9% Fund IV, 7.6% Fund V
Fee: .82% Fund I, .82% Fund II, .82% Fund III, 1% Fund IV, 1% Fund V, .75% Fund VI, .75% annually for Fund VII

SUHRCO REAL ESTATE ADVISORS INC.

401 Parkplace, Suite 501
Kirkland, WA 98033
Contact: Edwin C. Suhrbier, Pres., (206) 828-4464

Total real estate portfolio assets: $100 million
Total pension fund real estate assets: $90 million
Pension fund real estate clients: 3

Asset breakdown: 40% office, 60% retail
Participation offered: Real estate management, discretionary and non-discretionary accounts
Geographic diversification: Northwest
Minimum investment: Not available
Return on investment: Not available
Fee: Individualized for each client depending upon size of project and scope of services

SUNLIFE ASSURANCE COMPANY OF CANADA
200 University Ave.
Toronto, Ontario, Canada M5H 3C7
Contact: Peter A. Sailoum, VP, (416) 595-7809

Total real estate portfolio assets: $362 million
Total pension fund real estate assets: $362 million
Pension fund real estate clients: 68
Asset breakdown: 31% office, 44% industrial, 25% retail
Participation offered: Open-end pooled fund
Geographic diversification: Canada
Minimum investment: $50,000
Return on investment: Sliding scale on management fee accruets all funds. Cumulative - 17.6% 1 year; 15.4% 2 years; 14.9% 4 years (ending 12/88)
Fee: First $2 million, .6%; next $3 million, .45%; next $10 million, .3%; over $15 million, .15%. A servicing fee based on the real estate market value is also charged at the annual rate of .96%

TCW REALTY ADVISORS
400 S. Hope St., Suite 600
Los Angeles, CA 90058
Contact: Bruce L. Ludwig, Sr. Partner, (213) 683-4200

Total real estate portfolio assets: $2.4 billion
Total pension fund real estate assets: $2.4 billion
Pension fund real estate clients: 135
Asset breakdown: 40% office, 40% industrial, 16% retail, 4% land
Participation offered: Closed-end commingled funds, limited number of separate accounts
Geographic diversification: National
Minimum investment: $5 million commingled funds, $50 million separate accounts
Return on investment: Cumulative - composite funds 10.1%, 5 years; composite separate accounts 10%, 5 years; latest annual - composite funds 8.9%; composite separate accounts 9.2%
Fee: First year 1.2% per annum based on contributed capital. Thereafter, 1.2% per annum based on the lower of cost or market value of real estate assets. Incentive - 10% of excess after investor receives 10% cumulative return. Separate account fees are incentive based and are negotiated for each account

TOMLIN PROPERTIES INC.
5001 Spring Valley Road - LB-10
Dallas, TX 75244-3910
Contact: Dan Tomlin Jr., Chairman of Board, (214) 239-8041

Total real estate portfolio assets: $400 million
Total pension fund real estate assets: $30 million
Pension fund real estate clients: 6
Asset breakdown: 100% land
Participation offered: Closed-end, separate accounts
Geographical diversification: California, Texas
Minimum investment: $5 million
Return on investment: Cumulative - average approximately 36% compounded
Fee: Negotiable

THE TRAVELERS CORP.
One Tower Square - AMPS, 7MS
Hartford, CT 06183-6030
Contact: Edward A. Conley, Acct. Mgr., (203) 277-5492

Total real estate portfolio assets: $18.9 billion
Total pension fund real estate assets: $11.8 billion
Pension fund real estate clients: 174
Asset breakdown: 43.3% office, 14.4% industrial, 8.9% retail, 4.3% hotel, 8.1% timber, 13.5% apartments, 7.5% agriculture
Participation offered: Open-end and closed-end funds; separate accounts: equity, mortgages, balanced (equity and mortgages), agricultural, timberland and individually managed separate accounts.
Geographic diversification: 19.4% South, 37% Midwest, 24.4% East, 19.2% West
Minimum investment: Separate account R-equity, debt, balanced - $100,000; separate account T-1 - $1 million; Individually managed separate account - $50 million
Return on investment: Varies
Fee: Separate Account R-Equity, Debt, Balanced - 1% annual fee. Separate Account T-1 - 1.25% annual fee. Individually managed separate account - negotiated

TRIDENT/MEYER REAL ESTATE ADVISORS
222 South Harbor Boulevard, Suite 700
Anaheim, CA 92805
Contact: Keith D. Jewell, VP, (714) 778-3073

Total real estate portfolio assets: $428.2 million
Total pension fund real estate assets: $221.3 million
Pension fund real estate clients: 6
Asset breakdown: 25.2% office, 23.6% industrial, 47% retail, 4.2% residential
Participation offered: Closed-end funds, separate accounts
Geographic diversification: 37% Pacific, 13% Mountain, 50% Midwest
Minimum investment: $3 million
Return on investment: Performance data for all funds available on request.
Fee: Provides advisory services on a discretionary or non-discretionary basis. Fees are structured according to the basis selected

THE UNION LABOR LIFE INSURANCE CO.
111 Massachusetts Ave., N.W.
Washington, DC 20001
Contact: John E. Stephan, Director-Group Sales/Mktg., (202)682-6927

Total real estate portfolio assets: $449.4 million
Total pension fund real estate assets: $449.4 million
Pension fund real estate clients: 194
Asset breakdown: 47% office, 22.1% industrial, 24.3% retail, 4.8% hotel, 1.1% residential, .1%-.6% other
Geographic diversification: 31.4% East, 32.3% West, 28.9% Midwest, 7.5% South
Minimum investment: $50 million
Return on investment: Not available
Fee: Not available

UNITED BANK OF DENVER
United Asset Management Services 0091
United Bank Center
1700 Broadway
Denver, CO 80274-0091
Contact: Cheri Whalen, Asst. VP, (303) 863-6397

Total real estate portfolio assets: $30 million
Total pension fund real estate assets: $15 million
Pension fund real estate clients: 30
Asset breakdown: 5% office, 18% industrial, 65% retail, 1% land, 1% other
Participation offered: Open-end fund, separate account
Geographic diversification: Colorado
Minimum investment: $50,000 for fund
Return on investment: Cumulative - 39.2% (1/85 - 12/88); latest annual - 8.37% (as of 12/31/88)
Fee: Negotiable

UNITED TRUST FUND
4770 Biscayne Blvd.
Miami, FL 33137
Contact: Fred Berliner, Sr. VP, (305) 576-7711

Total real estate portfolio assets: $260 million
Total pension fund real estate assets: $180 million
Pension fund real estate clients: 5
Asset breakdown: 60% office, 20% industrial, 20% retail
Participation offered: Separate accounts
Geographic diversification: National
Minimum investment: $5 million
Return on investment: Cumulative - 8% current; 12%, 5 years; latest annual - 10.4%
Fee: 1% of asset value

WELLINGTON REAL ESTATE
75 State St.
Boston, MA 02109
Contact: James L. Walters, Pres., (617) 951-5000

Total real estate portfolio assets: $100 million
Total pension fund real estate assets: $100 million
Pension fund real estate clients: 1
Asset breakdown: 100% residential
Participation offered: Separate accounts and closed-end funds
Geographical diversification: National
Minimum investment: Separate account: $40 million; closed-end fund: $2 million
Return on investment: Cumulative - 2.3 yrs; 8.4% income only; latest annual - 8.23%
Fee: 1%-1.5% acquisition fee; .05%-1% annual management fee; 2%-5% incentive fee

WELLS FARGO REALTY ADVISORS
595 Market St., 15th Floor
San Francisco, CA 94105
Contact: J. Michael Johnson, VP-Director of Mktg., (415) 477-5805

Total real estate portfolio assets: $3.3 billion
Total pension fund real estate assets: $356 million
Pension fund real estate clients: 150
Asset breakdown: 3.1% office, 34.2% industrial, 49.6% retail, 13.1% residential
Participation offered: Open-end and separate accounts.
Geographical diversification: West and South
Minimum investment: $1 million
Return on investment: Latest annual - 7.2%
Fee: 1.25% per year on net real estate assets, deducted monthly. .25% per year on cash reserves, deducted monthly

THE YARMOUTH GROUP INC.
527 Madison Ave.
New York, NY 10022
Contact: David R. Hodes, Sr. VP, (212) 355-4810

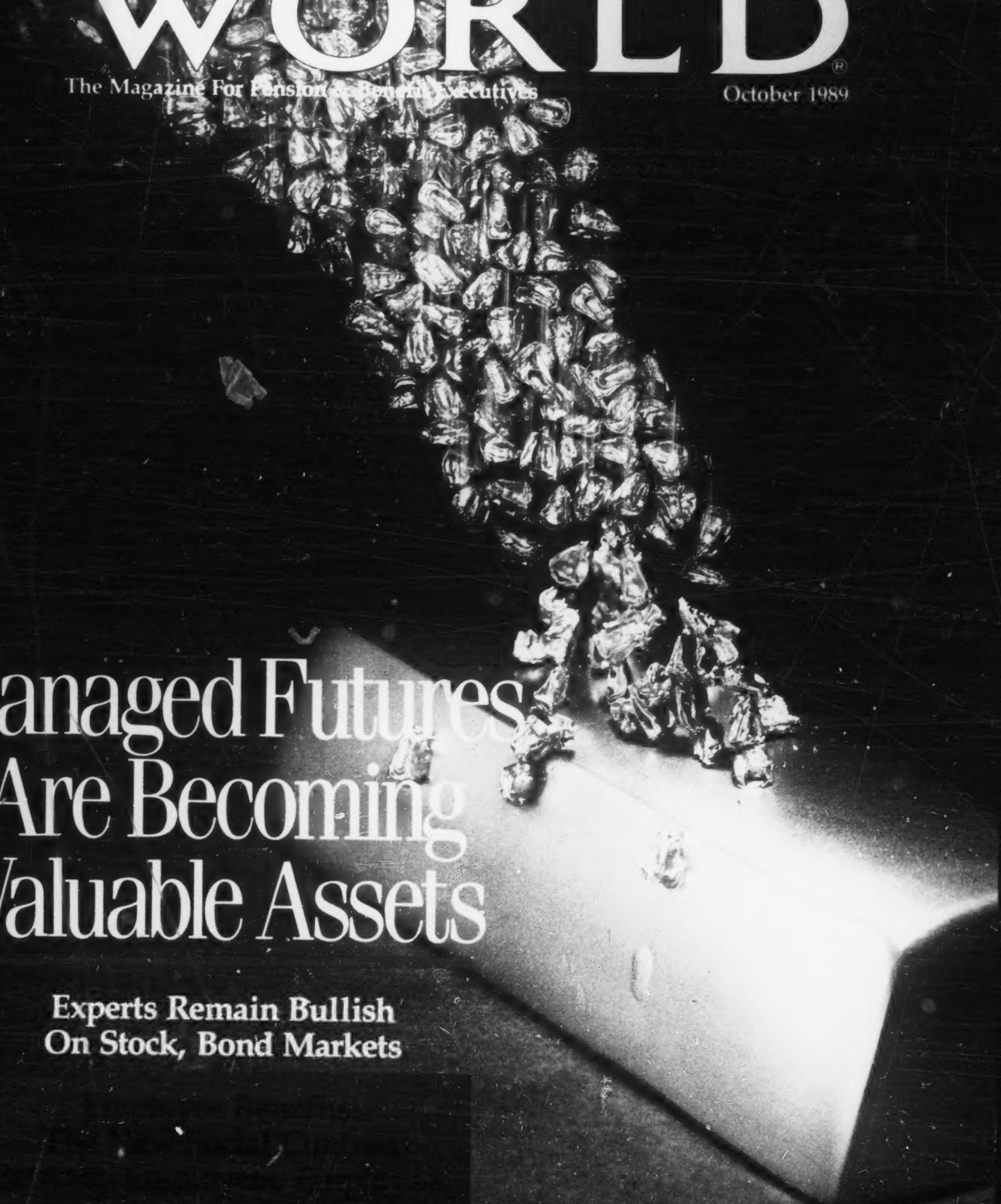
Total real estate portfolio assets: $4 billion
Total pension fund real estate assets: $2.7 billion
Pension fund real estate clients: 11
Asset breakdown: 77% office, 1% industrial, 22% retail
Participation offered: Separate accounts, Core Property Trust Inc. (commingled fund)
Geographic diversification: 33% East, 9% South, 15% Midwest, 43% West
Minimum investment: $100 million - separate accounts, $10 million Core Property Trust
Return on investment: Cumulative - 15.2%/year: 10 year rate of return; latest annual - 14.2%, year ending 12/31/88
Fee: Based on client investment criteria

C2425-1

PENSION WORLD®

The Magazine For Pension & Benefit Executives

October 1989



Managed Futures Are Becoming Valuable Assets

Experts Remain Bullish On Stock, Bond Markets

The Magazine
For Pension
& Benefit Executives

A Publication Of
Communication Channels, Inc.

PENSION WORLD

October 1989
Volume 25 Number 10

About The Cover: Futures managers can allocate assets strategically among a broad variety of markets, such as foreign exchange, precious metals, energy, finance and agriculture. Our cover story on managed futures begins on page 12.

Photography by Jerry Hoy, Double Vision Inc., Atlanta.

COLUMNS

Insights 6
New York Update 8
Washington Update 10
Cases & Rulings 45
Plan Design 51
Investments 54
Benefits 56
Guest Viewpoint 58

DEPARTMENTS

Editor's Notes 4
World News 36
News Briefs 40
Calendar 42
Resources 43
Executive Suite 44

INVESTMENTS

Managed Futures Are Becoming Valuable Assets 12
By Glenn Dubin And Henry Swieca
Institutions and corporations are beginning to view futures as an asset class for investment, rather than as speculation.

Managed Futures Can Add Portfolio Stability 16
By Richard Pike
Both aggressive and conservative investment managers are studying managed futures to enhance yield and reduce risk.

Merger Arbitrage Offers Unique Reward, Risk Characteristics 20
By Howard M. Rossman, Ph.D., Jai Luster And Gene Cordon
Historically, arbitrage has had low volatility compared to the S&P and other equity strategies.

Experts Remain Bullish On Stock, Bond Markets 22
By Phyllis Feinberg
Many conventional analysts believe the market's sharp rebound from the stock market crash is not over yet.

Plan Sponsors Re-examine The Manager Relationship 26
By Nick Mencher
Sponsor reduction of consulting and manager services has opened a niche for managers to work in an advisory basis.

Board Members Discuss ESOPs And National Retirement Income Plan 30
By Lynn Lanford
The members of PENSION WORLD's Editorial Advisory Board advocate employee initiative in retirement planning.

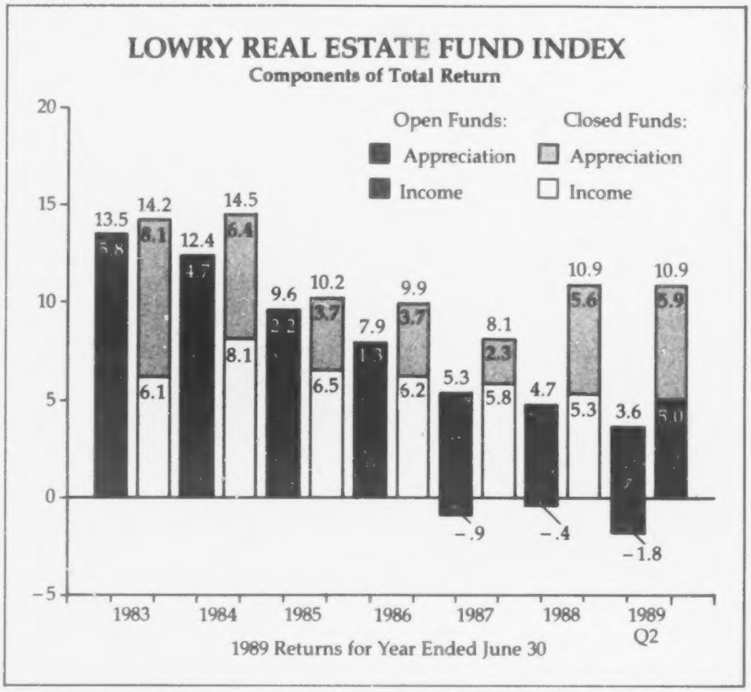
EMPLOYEE BENEFITS

How, When To Tell Employees They Don't Have A Job For Life 33
By George E. L. Barbee
Recent mergers, plant closings and downsizings have forced a new definition of the social contract between employer and employee.

BPA

PENSION WORLD (ISSN #0098-1753) is published monthly by Communication Channels, Inc., Jerrold France, President; Lawrence Moores, Executive Vice President; Buford Bryant, Treasurer. Editorial and advertising offices at 6255 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Telex 4611075COMCHANI. *PENSION WORLD* is a registered trademark of Communication Channels, Inc. © 1989 by Communication Channels, Inc. Second class postage paid at Atlanta, GA, and at additional mailing offices. Subscription rates: U.S., 1 year, $50; 2 years, $79; Outside U.S.A. (Surface Mail), 1 year, $70; Overseas Air Mail, $120. Single copies, $6. Group rates available. Directory copies: *PENSION WORLD* State Retirement Systems Survey (August), $9.95; *PENSION WORLD* Real Estate Portfolio Managers Directory (September), $9.95; *PENSION WORLD* Directory of Master and Directed Trust Services (December), $9.95; *PENSION WORLD* Software Products Directory (March), $14.95. The opinions expressed by authors and contributors to *PENSION WORLD* are not necessarily those of the editors or publisher. Articles appearing in *PENSION WORLD* may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of *PENSION WORLD* are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, *PENSION WORLD*, 6255 Barfield Road, Atlanta, GA 30328.

Open-end fund index return decreases



The Lowry Real Estate Fund Return Index income and appreciation components are reported for 1983-88 and the year ended June 30, 1989. The open-end fund index annual return was 3.6 percent for the year ended June 30, 1988, according to Michael Oliphant of Pension Real Estate Services Inc. in Atlanta. The closed-end fund index return for the four quarters ended June 30, 1988, was 10.9 percent compared to 9.5 percent for the previous year. The combined index return for the most recent annual period was 6.4 percent compared to the previous year's 6.6 percent. Three open-end fund managers reported substantial reductions in value for the quarter.

Total investment returns include income and appreciation. Income is stated as a percent of the current market value. Appreciation reflects changes in the market value as measured by appraisals. All returns reported are net of management fees.

Income returns reported for the quarter by the open-end fund managers range from 1.2 percent to 1.9 percent with an average of 1.4 percent. Appreciation returns provided by the open-end funds for second quarter 1989 ranged from −6.1 percent to 1.8 percent. The closed-end fund income returns ranged from a low of 0.6 percent to a high of 1.9 percent with an average of 1.2 percent. The closed-end funds reported appreciation ranging from −2.3 percent to 5.1 percent.

The income component of return should be relatively stable across time, regions and property type. Deviations from "market" income returns may provide an indication of pending changes in appraised value. For example, a fund with above average income returns will probably soon report appreciation that will tend to bring the income returns (stated as a percent of the new market value) downward to be consistent with the market.

There are other explanations for differences in income return provided by commingled real estate funds that should be understood. These include differences in the level of leverage employed, acquisition of properties that are not fully leased, the deal structure used, accounting practices, the amount of fees collected and capitalization rates that differ depending on property type and location.

Since more than one-third of the total return reported by the index funds from 1983 to the present has been due to changes in value of property, it is critical for investors to have an understanding of the appraisal process. Appraisals are performed by independent appraisers, but the fund manager bears ultimate responsibility for the results of the appraisal.

Also, appraisers are charged with expressing an opinion of the most probable selling price of a given property under competitive conditions.

Developing a value estimate using the income approach requires the appraiser to have current knowledge about market capitalization rates. For example, if the current annual income provided by a property is divided by the capitalization rate to determine value, a property with annual net operating income of $1 million would be valued at $12.5 million if the current cap rate is 8 percent. A small change in the cap rate will result in a large change in value.

In practice there are many more assumptions that must go into an appraisal. Future cash flows are estimated through analysis of current leases and future vacancy rate predictions, changes in expected rent and operating expenses, and predicting a future selling price using a terminal cap rate applied to the final year expected income.

Investors should go beyond accepting the numbers provided by managers and examine very closely the assumptions that are behind the appraisals. For example, in markets where there are huge amounts of empty office space and rents have been declining, lease-up and rental increase assumptions should match market conditions. This quarter's write downs in value have come primarily from open-end fund managers with redemption requests who are faced with selling properties to raise cash. A thorough analysis of appraisal assumptions provides the key to determining whether other funds would have similar write downs if faced with the reality of the market.

For further information on the Lowry Real Estate Fund Indexes, contact Michael Oliphant, Pension Real Estate Services, Lowry Consulting Group, Atlanta, Ga., (404) 431-1120.